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ABSTRACT

Because increasing numbers of children receive their health care through managed care organizations, and parents often turn to health care providers for information, these organizations have a unique opportunity to affect children's development. This document comprises two publications, a full report and a brief; it discusses the role of the health care industry in investing in early childhood development services. The report compiles 13 strategies to help health plans achieve 2 critical goals: (1) create an early childhood development infrastructure; and (2) provide a seamless system of early childhood development services. Following an introduction discussing key factors in children's development, part 1 of the report identifies strategies to achieve Goal 1, including incorporating developmental specialists into pediatric primary care settings, including family advocates in the well-child care team, offering group well-child visits, using questionnaires prior to a child's visit to identify parenting concerns, providing temperament assessment and follow-up services, and providing telephone access to child development support. Part 2 presents Goal 2 strategies, including beginning parenting education in the prenatal period, linking community and social supports to pediatric primary care, and coordinating with state and community health services. Brief case studies and program model descriptions are provided as examples for individual strategies. Part 3 proposes a process for assessing and building early childhood systems, emphasizing the inclusion of health plan members in decision-making. The report concludes that managed care organizations can support and enhance families' ability to nurture their young children's development. Contains approximately 75 references. The "In Brief" summarizes the report. (KB)

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Managed Care and Early Childhood Development

right time right place

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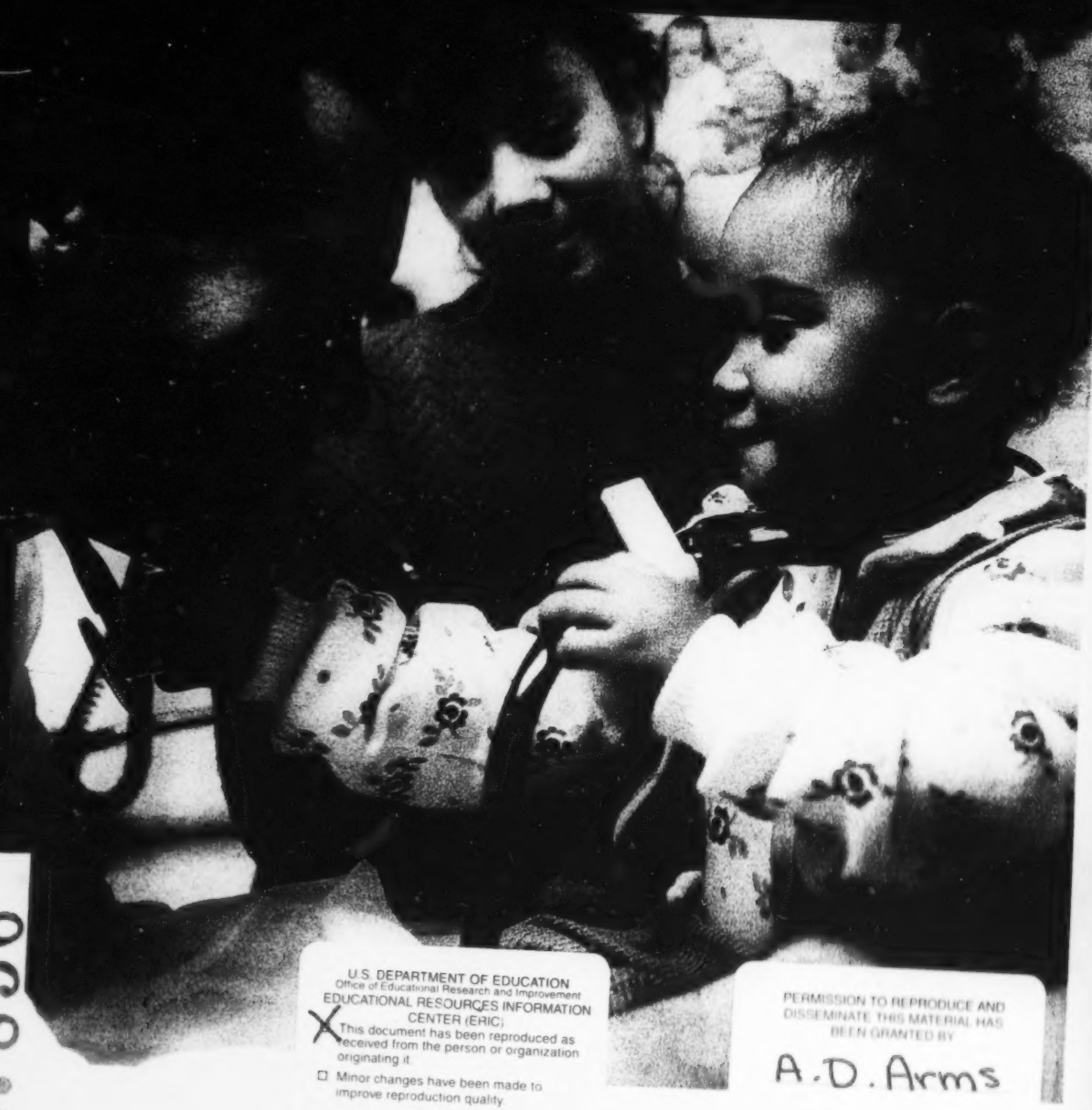

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CHILDREN NOW

"The importance of children's brain development during the first three years can no longer be ignored. The health care industry must play an active role in ensuring that parents have the information they need."

■ Rob Reiner, Chairman & Founder, *I Am Your Child* public awareness campaign

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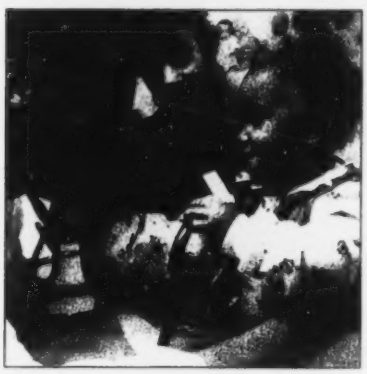
3

About This Project



In 1998, Children Now, Kaiser Permanente and the *I Am Your Child* public awareness campaign are convening health plan leaders to discuss their industry's investment in early childhood development services. Over the next several years, Children Now will work with these and other managed care organizations to fulfill this plan and mark their progress.

In addition, Children Now will work with the community of health insurance purchasers (purchasing groups, government and individuals) to build a demand for quality early childhood development services and with researchers to create and implement consumer and employer accountability tools.

This report was independently commissioned by Kaiser Permanente. Additional support for the project was provided by The Atlas Family Foundation, The California Endowment (match for The Atlas Family Foundation), and The Commonwealth Fund. A future report will address adolescent health.

Endorsing Organizations

Association of Maternal and Child Health Programs

Children's Defense Fund

CityMatCH

Families USA

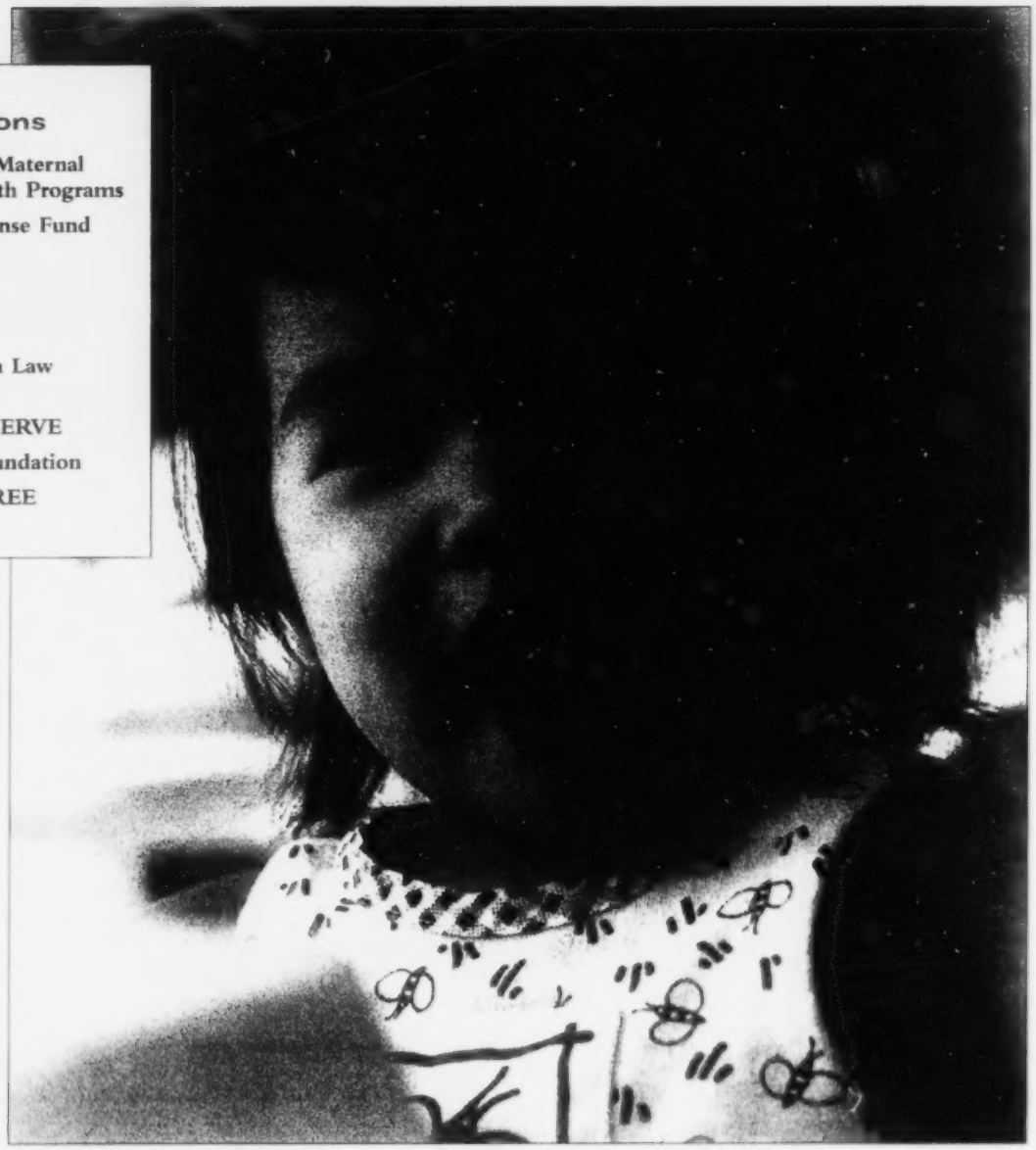
Family Voices

National Health Law Program

New England SERVE

The Reiner Foundation

ZERO TO THREE



Foreword 5

Executive Summary 6

Introduction 8

Goal 1: *Create An Early Childhood Development Infrastructure* 13

Strategies:

- Incorporate developmental specialists into pediatric primary care settings 13
- Strategies in practice: *Asking the right questions* 14
- Include family advocates in the well-child care team 16
- Offer universal, voluntary home visiting for families with newborns 18
- Offer group well-child visits 20
- Strategies in practice: *"We're healthy and normal!"* 21
- Use questionnaires prior to a child's visit to identify parenting concerns 22
- Provide temperament assessment and follow-up services 24
- Provide access to child development support through a telephone system 26

Goal 2: *Provide A Seamless System Of Early Childhood Development Services* 27

Strategies:

- Begin parenting education in the prenatal period 27
- Ensure that the first well-child visit is scheduled prior to maternal and newborn discharge from the hospital 29
- Encourage all health care providers and administrative staff to promote key child development messages 31
- Link community and social supports to pediatric primary care 34
- Establish a system for referral follow-up 35
- Coordinate with state and community health services 36
- Strategies in practice: *Extending seamlessness into the community* 37

Implementation: *Establish An Early Childhood Development Monitoring System* 38

- Early Childhood Work Group 38
- Data collection 39
- Reporting to membership 40
- Managed care values & communication principles 42

Conclusion 43

Appendices 44

Our nation is poised to take action for young children.

Neuroscientists tell us that children's experiences and environment have a profound influence on their brain development. Surveys show that families want information, support and guidance about how to nurture their children during their first three years. And when this support is provided appropriately, children and families can flourish.

Yet our society lacks a single point of entry through which families with infants and toddlers can access the services they need. An infant has no equivalent to public school, the century-old institution that brings together children, families and their communities.

Where are families with the youngest children to go?

One infrastructure that exists—and is becoming near-universal for children—is the health care system: not only is it the first institution that families encounter with their newborns, but for most, it is also their only source of regular contact dedicated to promoting child and family well-being. Increasingly, that infrastructure is a managed care organization.[1]

Families with young children already expect their managed care organization to provide access to services related to their child's physical well-being. But health care encompasses more than treating disease. Promoting children's health also includes addressing their emotional, cognitive and social development. All four are intertwined and require focused attention.

The unique characteristics of managed care organizations—including the links they create among health professionals and institutions and their fiscal incentive to focus on preventive care—make them particularly well-suited to meeting the needs of families for child development services and guidance. This report, with strategies derived from these characteristics, can help health plans create their own early childhood plan of action.

We are poised to take action for young children. Managed care organizations are critical to our nation's success.

Our understanding of the human brain has come far in just a few decades. Not too long ago, scientists conceptualized the newborn brain as relatively inactive, with a gradual but steady increase in complexity as the child approached adulthood. Genetic endowment overshadowed the importance of the environment in determining the child's future abilities and character.[2,3]

But, recently, the consensus on early childhood development has shifted. While researchers still agree that children are born with a certain genetic make-up, they now almost universally believe that the newborn brain is remarkably flexible. A child's experiences and environment interact with his genetic endowment as he develops socially, emotionally, cognitively and physically. His genes may open doors, but his daily experiences enable him to walk across each threshold.[4]

Children's families have a tremendous impact on those critical daily experiences. However, in two recent surveys, families with young children expressed a need for more parenting support, guidance and services:

- Only 44 percent of first-time parents say they feel very confident about caring for their baby at the outset.[5]
- Slightly over 40 percent of mothers and 30 percent of fathers report experiencing one or more depressive symptoms when their child is very young.[6]
- About two-thirds of new parents do not attend a class or discussion about parenting.[7]
- Less than half of parents say that they know what signs to watch for with their child's emotional, social or intellectual development.[8]
- Sixty percent of parents report that they would be extremely or very interested in receiving more information about brain development.[9]

The unique opportunities of managed care

Where can families get this information? One answer is their child's health care provider.[10] The American Academy of Pediatrics schedule of well-baby visits recommends 10 visits before the age of three,[11] giving clinicians frequent opportunities to assess child and family well-being and to help families nurture their child during each developmental transition.[12]

Increasingly, children receive their health care through managed care organizations.[13] Seventy-seven percent of Americans and their dependents who have employer-based insurance are enrolled in a managed care plan.[14,15] Forty percent of all Medicaid enrollees receive coverage through a managed care plan, a four-fold increase in five years.[16]

In 1995, Children Now was commissioned by Kaiser Permanente, the nation's largest nonprofit managed care organization, to investigate strategies for enhancing health care services for children. This report is about children from birth to age three; a future report will highlight the unique needs of adolescents.

How to use this report

This report features two critical goals toward creating an effective system for delivering early childhood development services: (1) create an early childhood development infrastructure and (2) provide a seamless system of early childhood development services. We have compiled thirteen strategies that can help health plans reach these goals. We also propose a process for health plans to use when assessing and building their early childhood systems, one that emphasizes the inclusion of health plan members in decision-making.

Each managed care plan will develop its own priorities among these (and perhaps other) potential components of early childhood systems. The businesses and purchasing groups that contract with plans may have the ability to influence these decisions by negotiating for changes in the health plan's structure, administrative practices and benefits package.

The top leaders of managed care organizations will set the stage for the success of the efforts to reach the two goals by, for example, encouraging innovation, promoting internal discussions about child development interventions and offering financial support for innovative programs. ■

Goals and Strategies

Goal 1: ***Create An Early Childhood Development Infrastructure***

Strategies:

- Incorporate developmental specialists into pediatric primary care settings
- Include family advocates in the well-child care team
- Offer universal, voluntary home visiting for families with newborns
- Offer group well-child visits
- Use questionnaires prior to a child's visit to identify parenting concerns
- Provide temperament assessment and follow-up services
- Provide access to child development support through a telephone system

Goal 2: ***Provide A Seamless System Of Early Childhood Development Services***

Strategies:

- Begin parenting education in the prenatal period
- Ensure scheduling of the first well-child visit prior to hospital discharge and follow-up as needed
- Encourage all health care providers and administrative staff to promote key child development messages
- Link community and social supports to pediatric primary care
- Establish a system for referral follow-up
- Coordinate with state and community health services

Implementation: ***Establish An Early Childhood Development Monitoring System***

Right Time, Right Place

The new science

Close to 400 years ago, Galileo modified an existing instrument—a weak, maritime telescope—and pointed it upwards, towards the sky. What he saw dramatically changed not only the field of astronomy, but also the way we think about ourselves and our world.

We are experiencing another shift in one of our most basic beliefs. Scientists recently refocused two of the 20th century's instruments—the MRI and the PET scan—from the brains of adults to those of our youngest children. Again, we must grapple not only with new science, but also with its implications for our society and our values.

Our understanding of the human brain has come very far in just a few decades. Not too long ago, scientists conceptualized the newborn brain as relatively inactive, with a gradual but steady increase in complexity as the child approached adulthood. Genetic endowment overshadowed the importance of the environment for determining the child's future abilities and character.[1,2]

But, recently, the consensus on early childhood development has shifted. While researchers still agree that children are born with a certain genetic make-up, they now almost universally believe that the newborn brain is remarkably flexible. A child's experiences and environment interact with his genetic endowment as he develops socially, emotionally, cognitively and physically. His genes may open doors, but his daily experiences enable him to walk across each threshold.

As babies mature, they undergo a series of developmental "prime times." These periods are optimal for the initiation of key milestones, such as language acquisition or the development of certain social competencies. Do these "windows" ever fully and firmly close? Scientists are still unclear: while we know that some toxins can irreversibly damage children's ability to reach their full developmental potential,[3] the long-term effect of other environmental factors is still unknown. Research and practical experience indicate that the windows do shut at least part-way. For example, learning a new language as an adult or even a teenager is certainly more difficult than as a young child.

Can children benefit from services after age three?

The answer is firmly yes. Research demonstrates that intervening in the lives of children, teenagers and even adults can make a positive difference if the intervention is appropriately designed and implemented. While managed care organizations should capitalize on all opportunities for prevention, no child's disability, developmental delay or mental health problem should be left untreated because he is considered "too old."

In addition, scientists tell us that the physical composition of a child's brain reflects repeated experiences. Synapses formed between neurons (brain cells) will either grow stronger if used repeatedly or will wither if understimulated. The patterns of childhood experiences—whether adults sing or

shout; if they read books to children or spend little time with them—contribute to the physical structure of children's brains and, thus, how they later interpret, react to and live in their world.

The process of brain development is shaped by children's experiences, both positive and negative. Families, the constant caregivers in children's lives, can offer love and nurturing that strengthen children's ability to cope with the negative consequences of future stress.[17] Nearly all new mothers and fathers want to provide their baby with everything she needs. As pediatrician T. Berry Brazelton writes, the most important question to families with young children is, "How will I get to be the parent that I long to be?"[18]

Families may not realize the importance of the everyday aspects of caregiving. "Parentese," the sing-song, high-pitched tone so many of us use when we talk to babies, is easier for young children to understand and contributes to their language development.[19] Reading aloud not only promotes language development, but also provides families with quiet time for interaction. Soothing a child's cries teaches her to trust her family to meet her needs. This affectionate bond, called attachment, is essential to all aspects of children's well-being.[20]

What is child development?

Child development is the complex process by which a child grows—physically, emotionally, socially and cognitively—with each domain highly interdependent. While the course of development follows a general sequence, each child's developmental path is a unique reflection of his or her genetics, temperament and caregiving environment.

Brain development is also affected by negative experiences. For young children, stress can have serious consequences. Research has shown that stress increases the level of the hormone cortisol, which has the ability to undermine neurological development.[21]

One source of stress for young children is the lack of a "goodness of fit" between them and their caregivers. Goodness of fit refers to the quality of the match between children's behavior and temperament and family expectations. The family may, for example, unknowingly disrupt the child's activity patterns by overstimulating him. Or, the family may mistakenly believe that they risk spoiling their infant if they respond quickly to his cries. In the extreme, these types of situations can increase a child's stress level and potentially lead to failure to thrive and other developmental problems.[22]

Continued

Another source of stress for young children is violence. Early evidence suggests that preschoolers, given their age-appropriate concerns with safety and their reliance on adults for stability, are particularly vulnerable to the effects of witnessing violence.[26] Children as young as 20 months have shown signs of post-traumatic stress disorder after witnessing real-life violence[27] and watching violence on TV has been linked to aggressive behavior in toddlers.[28]

Given these realities, it is no surprise that families with young children want parenting support, guidance and services. But where can families get this information? One answer is their child's health care provider.[29] The American Academy of Pediatrics schedule of well-baby visits recommends 10 visits before the age of three.[30] At one health maintenance organization, families with young children average more than seven encounters with the health system per year;[31] this number would be higher for families with children with special health care needs. Thus, clinicians have frequent opportunities to assess child and family well-being and help families nurture their child during each developmental transition.[32]

Moreover, seeking pediatric care carries no stigma. Medical professionals have earned society's respect and it is almost universally acknowledged that good parenting includes regular visits to a health care provider.

In turn, health care providers can establish child development services as an appropriate component of pediatric care. Just as pediatric providers monitor children's physical growth, they (or their colleagues) can work with families to assess children's emotional, social and cognitive development and secure necessary services. With advice, support and services from their health care providers, families can learn to create a home environment that will nurture that growth and help ensure a positive future for their children.

Key factors influencing children's well-being

The health and well-being of children's families and communities profoundly affect the course of children's development. For many children, their environment can hinder this process:

- Families are living under tremendous **economic stress**. One in four American children under age three is growing up in poverty.[33] One-third of families with incomes less than $40,000 a year report they have some trouble paying for basic supplies such as food, diapers, clothes or shoes for their child.[34]
- Many families with young children also experience **isolation.** Fewer live near their extended family—what used to be a common support network.[35]
- Too often, young children experience **violence** firsthand. One in three abused children is under age one[36] and the fourth leading cause of death for children ages one to four is homicide.[37]
- **Environmental hazards** can be especially harmful for young children, whose normal exploratory behavior puts them at heightened risk for toxic exposure.[38] Exposure to lead,[39] air pollution[40] and pesticides[41] can have profound effects on young children's respiratory, immune and reproductive systems.
- **The health and well-being of children's families** has a strong impact on children's own health and well-being. Depressed mothers may have difficulty bonding with their newborns and children whose mother or both parents are defined as "problem drinkers" have an increased risk of serious injury.[42,43]

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The unique opportunities for managed care

In 1995, Children Now was commissioned by Kaiser Permanente, the nation's largest nonprofit managed care organization, to investigate strategies for enhancing health care services for children. This report is about children from birth to age three; a future report will highlight the unique needs of adolescents. Among the vast number of critical children's health issues, this report focuses exclusively on child development and the role that managed care organizations are especially qualified to play in supporting the development of young children.

Managed care will likely continue to grow in prominence as the mechanism for the delivery and financing of health care services.[44] Seventy-seven percent of Americans and their dependents who have employer-based insurance are enrolled in a managed care plan.[45] Forty percent of all Medicaid enrollees receive coverage through a managed care plan, a four-fold increase in five years.[46]

Surveys of new parents show need for support

One survey by The Commonwealth Fund asked more than 2000 parents of children under three years old about their experiences and feelings about their new baby. ZERO TO THREE polled more than 1000 parents about their knowledge of child development and how it informs their parenting practices. Highlights from the surveys include:

- Only 44 percent of first-time parents say they feel very confident about caring for their newborn baby.[47]
- Just over 40 percent of mothers and 30 percent of fathers report experiencing one or more depressive symptoms when their child is very young.[48]
- About two-thirds of parents do not attend a class or discussion about parenting.[49]
- Less than half of parents say that they know what signs to watch for with their child's emotional, social or intellectual development[50]
- Sixty percent of parents report that they would be extremely or very interested in receiving more information about brain development.[51]

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Continued

While "managed care" serves as a catch-all term, most managed care organizations (MCOs) share certain features that could enhance their ability to implement the child development strategies proposed in this report:

- As **integrated delivery systems**, MCOs bring together a range of health care professionals and services, potentially enhancing the degree of coordination and continuity in the delivery of care.
- Their financial structures are an incentive to promote **preventive services**, a critical precursor to the delivery of optimal child development services.
- Their contracts specify a set **benefits package**, facilitating a comparison between managed care plans regarding the early childhood and other services that they provide.
- They rely on maintaining a **membership base**, creating an incentive for being responsive to members' concerns and including members in policy decision making.
- They are an **early and regular source of support** for families and thus have the ability to monitor and support families in their parenting role.
- They can support **quality improvement** activities, and are thus equipped to analyze and implement the best ways to enhance services for young children and their families.

Other features—such as the financial pressure to see more patients at lower costs—can challenge attempts to embark on innovative early childhood development strategies. Managed care organizations can set policies to counter these negative incentives and enhance the capability of clinicians to offer an array of child development services.

How to use this report

This report features two **critical goals** for creating a comprehensive early childhood system:

- ***create an early childhood development infrastructure,*** which includes the appropriate personnel and services in the benefits package, and
- ***provide a seamless system of early childhood development services*** that facilitates links within the managed care organization as well as between the MCO and the community.

We have compiled thirteen **strategies** that can help health plans reach these goals.[52] We also propose an **implementation process** for health plans to use when assessing and building their early childhood systems, one that emphasizes the inclusion of health plan members in decision-making.

Each managed care plan will develop its own priorities among these (and perhaps other) potential components of early childhood systems. A plan's success in these efforts depends in large part on the priorities of its administrative and medical leaders. In addition, the businesses and purchasing groups that contract with plans may have the ability to influence these decisions by negotiating for changes in the health plan's structure, administrative practices and benefits package.

The interventions presented in this report include only some of the promising practices in place in health care settings. As such, Children Now intends each strategy to serve not as a ready-made program, but as a catalyst that can lead to the creation of other programs that may have greater effectiveness within a particular community. Children Now hopes that health plans, businesses, state governments and consumers will use this report to create and fulfill their unique vision of early childhood services. When possible, we have provided research results and cost-effectiveness data (under the heading "Benefits & the bottom line") to help these efforts. ■

Create An Early Childhood Development Infrastructure

Managed care organizations differ from traditional insurance, in part, by integrating a wide array of personnel and services. With the growing recognition of the importance of early childhood development, MCOs may find that creating a well-defined early childhood development infrastructure—with specialized personnel and services—helps them better meet the parenting needs of their members.

The design of a health system's child development infrastructure must allow for the differences among families and among health care providers. Some families may seek a pediatrician to address their child development questions, while others may feel most comfortable articulating their parenting concerns to a peer family advocate. Likewise, some pediatricians have the interest, time and resources to discuss child development, whereas others would prefer to rely on child development specialists to address behavioral and parenting questions.

When establishing (or building upon) an early childhood infrastructure, health plans should also consider the cultural norms of the families being served. Interpreters and bilingual health professionals are valuable additions to health plan staffs. In addition, health plans can help address cultural issues by encouraging a partnership between health care providers and families in the development, maintenance and evaluation of health care services. The final section of the report provides a model for family involvement.

Strategy 1 Incorporate developmental specialists into pediatric primary care settings

Health care systems may present structural barriers which prevent both families and pediatric primary care providers from fully discussing child development issues during well-child or sick visits. Families may not raise their developmental concerns because they believe that their provider is too busy or unlikely to be responsive. Indeed, the average pediatric primary care provider spends less than 15 minutes with each patient[53] and some studies indicate that some may be unable, unwilling or unaware of the need to address developmental concerns in-depth.[54]

Other families may not realize that their child is exhibiting early signs of a future developmental problem. They may notice, for example, that their child is very quiet or easily distracted, but not identify this behavior as significant. Likewise, some pediatric primary care providers have not been trained to assess developmental problems in their earliest, pre-acute stages.[55] Opportunities for intervention may be missed if the health plan is not structured to address developmental concerns at their earliest manifestations.

One solution is to enhance the managed care plan's provider network by including a professional on the pediatric team who is trained to identify and evaluate developmental and behavioral concerns in very young children. Developmental specialists can provide such care and help families develop parenting strategies that meet the unique needs of their child. (Other pediatric teams may choose to include, or already include, a pediatric nurse practitioner or pediatrician with specialty training in child development. These professionals, if their schedule permits, can serve a similar function to a developmental specialist.)

■ Strategies in practice: Asking the right questions

At a meeting with all the pediatric clinicians at a Kaiser Permanente clinic in the Central East Division, Developmental Specialist Claire Lerner mentioned that since she had come to the practice, several three- and four-year-old children had been referred to her with fairly serious communication disorders and delays. Accounts from families about their children's development suggested that early indicators of difficulty had been apparent even before age two, when pediatricians typically become vigilant about potential delays or problems in language development.

In the hope of identifying these problems earlier, Claire suggested that at the 15-month visit, pediatricians ask parents how their child lets them know what he or she wants. "By this age, a child should be engaged in complex gesturing, using facial expressions, vocalizations or words to communicate their intentions, desires and needs," Claire explained. "If a child has not developed these skills yet, this would be a good time to refer the family to me for a consultation."

An hour after this meeting, one of the pediatricians knocked on Claire's door and said, "I have a 15-month-old, Mark, in my office. I just asked "The Question." It turns out that he is communicating only by grunting and his parents don't know what he wants most of the time. Would you see them?"

The doctor brought the family to Claire's office and introduced Claire to Mark and his parents, Carol and Tom. Claire first asked them about their concerns, which centered around sleep problems and his fussy eating habits. When Claire asked about communication, Carol and Tom reported that Mark used only one or two words and gestured very little. He also had trouble following their directions and seemed to be "in his own world." In order to understand what the parents were experiencing, Claire engaged the whole family in play. Although Mark grew more socially responsive over time, it was clear that he had serious developmental challenges in the areas of relating and communicating.

Claire assisted the family in quickly identifying and enrolling Mark in a community-based therapy program. She also helped the parents develop a home program they could do with Mark and continued to meet with them to supplement the county services. During this time, Claire kept Mark's pediatrician up-to-date, when she checked in with the family about Mark's development during his well-child and sick visits. Mark responded very well to these integrated efforts and showed significant improvement within the first two months.

A few months later, Carol said she had been impressed that her pediatrician had asked the right question at the right time, enabling Mark to be connected to the services he needed right away. She was also extremely grateful that a developmental specialist was there to help them understand Mark's complex challenges. Without that support, Carol knew that she and her husband would have felt overwhelmed and confused—and perhaps been less effective in helping their son.

The pediatrician was also grateful to have this new tool, which took so little time to integrate into her exam, as well as a specialist on-site to respond quickly and appropriately to such a need. Together, they had a profound, beneficial impact on this child and family.[36] ■

17

In order to be effective, the developmental specialist's role must be acknowledged as an integral component of pediatric care. One way to achieve this goal is for primary care providers to introduce the topic of child development and behavior during the health visit, thereby communicating that emotional, social and cognitive development are as important to monitor and address as physical growth. Then, the primary care provider can introduce the family to the developmental specialist and either continue to participate in the discussion or leave the family and developmental specialist on their own.

If further consultation with the developmental specialist is warranted, the child and family can participate in a developmental assessment that not only evaluates the child's developmental status, but also serves to help families understand their child's unique strengths and challenges. As appropriate, the developmental specialist works with families to create appropriate home-based interventions, schedules additional appointments and makes referrals to more intensive services. A strong relationship between the developmental specialist and the family is key to ensuring that these referrals are effective. It is also vital for the developmental specialist and the pediatric primary care provider to stay in close communication about each family.

■ A Model: ZERO TO THREE—Kaiser Permanente (Central East) Joint Project

A Kaiser Permanente pediatric clinic in Washington, DC participated in a pilot program with ZERO TO THREE: National Center for Infants, Toddlers, and Families in which a child development specialist was integrated into the clinical team.[57] She had a highly flexible schedule that allowed her to participate in well-child examinations for infants and toddlers, offer follow-up appointments as needed, and accompany some families to community-based referrals. In addition, ZERO TO THREE provided the developmental specialist with ongoing access to training and clinical supervision, based on the needs and characteristics of the patient population.[58]

Benefits & the bottom line

- Out of a sample of 52 families who consulted with the developmental specialist and who returned surveys, 63 percent said they learned something new about their child's behavior and how to handle it.
- Sixty-nine percent reported learning something about their child's growth and development that they didn't know.
- Seventy-three percent said that the time with the developmental specialist had enabled them to better help their child learn.[59]
- Health care provider satisfaction with the developmental specialist was high. As reported by a Kaiser Permanente pediatrician involved with the project, "The developmental specialist provides immeasurable good will and a necessary service for Kaiser through her ability to delve into areas and problems the providers don't have the time for, may not know how to handle, and would almost certainly refer out."[60]
- For practices interested in providing enhanced developmental services, a developmental specialist will cost less than that of a pediatrician and, thus, can be an effective use of limited resources.

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Strategy 2 Include family advocates in the well-child care team

Health care services—whether managed care or not—can be confusing for families with young children. Families have to master a vast array of information about pediatric services at the same time that they are enmeshed in the exhilarating and emotionally draining process of learning how to care for their newborn. If a family is coping with additional stress, that confusion can become overwhelming.

One solution is to include a family advocate as part of the well-child care team. Family advocates typically live in the neighborhood served by the health care facility and are comfortable navigating the health care system. Perhaps their own child receives care at that site.

The role of family advocates can vary. As part of a broad-based family-centered care initiative, Montefiore Medical Center in Bronx, New York has hired three Family Advocates to support families with hospitalized children and is in the process of expanding the Family Advocate program to its clinics. All three Advocates have a child who is currently receiving or once received care from Montefiore. The Advocates help families work with health professionals and access services they need.

Pediatricians, nurses, health educators and other health care providers can benefit from the presence of family advocates. Since family advocates work with a variety of patients, they can present clinicians with a broad-based evaluation of the health care system. They will know if families frequently are confused about a certain aspect of the system (laboratory services, for example) or what logistical barriers contribute to missed appointments. Their informal relationship with families, as well as their own experience, enable them to become repositories of family perspectives on the health plan.

In some health care settings, it may be beneficial if family advocates share an ethnic or socio-economic background with the membership of the managed care organization—especially if it is different from the majority of the health care providers. In these circumstances, the family advocate plays the additional role of enhancing the cultural competence of the health care services. Certainly, only some health plan members would serve as effective (or would even want to be) family advocates. Like all health plan personnel, they must be carefully selected and trained. In addition, given the degree of responsibility and the importance of a long-term commitment, family advocates should not be considered volunteers, but rather receive an appropriate stipend.

A Model: Pediatric Pathways to Success at Boston Medical Center

The Pediatric Pathways to Success program, founded in 1994 by pediatrician Barry Zuckerman, MD and early childhood specialist Margot Kaplan-Sanoff, EdD, provided enhanced pediatric care to at-risk families at Boston Medical Center. (The Pathways program was the model for Healthy Steps and is now known by that name.) Each Pathways team included a Family Advocate, who played a critical role in seeking to increase families' use of preventive and primary care services. The Family Advocates had flexible schedules which allowed them to travel with families to WIC offices, housing programs and other services, providing peer support and education. By "bridg[ing] the gap between medical practice, social services, community programs and family needs,"[61] the Family Advocates helped to build families' relationship with their primary care site. (See page 34 for more information on Pathways.)

Nearly all Pathways families had health insurance through Medicaid managed care, which paid a capitated rate for each child. Knowing that the Pathways program reduced emergency room visits and other costs enabled the Pathways program to pay for the Family Advocates out of the capitated rate. Other providers affiliated with the Pathways program (such as behavioral health specialists and attorneys) were funded through private and federal grants.

Benefits & the bottom line

- In a year-long study, Pathways infants made only 1.47 Emergency Room visits, compared to 5.34 visits by infants in the comparison group, and these visits were found to warrant "immediate attention."[62] Correspondingly, Pathways infants made significantly more sick visits than their non-Pathways peers, demonstrating a more appropriate use of the health care system.[63]
- Non-Pathways infants were hospitalized more often and for longer periods. Initial analysis of medical charts indicated that non-Pathways infants were hospitalized more often for preventable conditions. The hospitalization costs for the non-Pathways infants were 50 percent higher than the Pathways infants.[64]
- In the first eighteen months of the program, only 2.2 percent of Pathways families dropped out of pediatric care, compared to approximately 45 percent for families in other pediatric care.[65]
- Nearly 90 percent of Pathways families were up-to-date on their immunizations, compared to 45 percent of Boston children.[66]
- Evaluators have concluded that the Pathways program paid for itself, while improving the health status of participants.[67]

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Strategy 3 Offer universal, voluntary home visiting for families with newborns

"All young families could benefit from some good help with a new baby."[69] This opinion from the U.S. Advisory Board on Child Abuse and Neglect buttresses its recommendation for universal, voluntary home visiting as a strategy not only for reducing child maltreatment, but also to support all families with young children.

Home visiting programs have received considerable attention from policymakers and researchers alike. A number of states have legislated home visits if mothers and infants are discharged from the hospital within 24-48 hours of the child's birth, and some health plans have offered postpartum health visits for years. The evidence supporting home visiting is mixed, in part because home visiting programs vary dramatically as to their purpose, the populations they target and the expertise and training of the providers who conduct the visit.

Home visiting as an effective intervention attracted significant attention based on a study conducted by David L. Olds, Harriet Kitzman and their colleagues in Elmira, New York in 1986.[70] This research indicated that long-term home visiting by a nurse reduced the rates of subsequent pregnancy, reduced rates of health care encounters in which injuries were reported and increased labor force participation, among other findings. A follow-up study found continuing benefits fifteen years later.[71] Since that time, the same researchers have reported on a replication of the home visiting program within a predominantly African American community. Here, too, they demonstrated impressive results: nurse-visited children spent fewer days in the hospital for injuries and ingestions, their mothers held fewer beliefs associated with child abuse and neglect and their mothers attempted breastfeeding more frequently.[72]

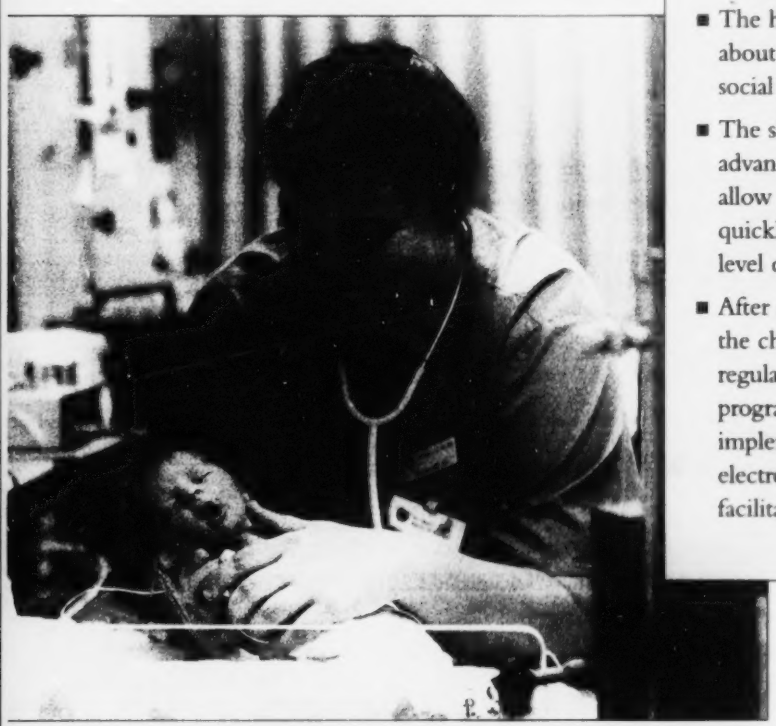
Home visiting enables health care providers to understand the child's family and environment in ways that an office visit cannot possibly address. The home visitors can promote child development and family functioning by identifying and acting on "teachable moments." At the same time, home visitors must recognize that all families are different and that there is rarely one right way to approach a parenting concern.

Home visitors must also have the means for sharing their observations and experiences with the other pertinent members of the managed care plan's network. The pediatric primary care provider is one important contact, but (depending on the referral policies of the managed care organization) the home visitor might identify a family's need for access to lactation consultants, health educators, adult health care or other providers.

Home visiting can effectively establish trust between families and health plans—a critical step to ensuring good communication in the years ahead. By traveling to the family, the home visitor confirms that the family is the primary source of care for the child and that the health plan's role is to support that relationship.[73] It is no surprise that newborn home visiting has been found to increase patient satisfaction. In one survey, 67 percent of families who used a home visiting service found it useful.[74]

■ A Model: Kaiser Permanente (Denver/Boulder Area) Perinatal Home Care Program

The Kaiser Permanente (Denver/Boulder Area) Perinatal Home Care Program provides an advanced practice nurse home visitor to pregnant and parenting families who have been referred by their clinician. Categories for referral include both low- and high-risk groups. Most low-risk families receive one or two visits, but more intensive services are available if ongoing needs are detected. Ninety percent of all deliveries in the Denver/Boulder Area receive a home visit. The home visitors include 12 nurse practitioners and certified nurse midwives; a licensed professional counselor who works with teens; an office manager and program director. In 1997, the program served 7,751 clients and provided 12,750 home visits.



Benefits & the bottom line

- More than 98 percent of participants rate the Kaiser Permanente Denver/Boulder Area Perinatal Home Care Program either "good" or "excellent."[75]
- Pediatricians, neonatologists and perinatologists highly value the program for its case management, monitoring and assessment services. Each home visitor tends to work within the same geographic area and thus with physicians associated with the same Kaiser Permanente clinic. This specialization, combined with the longevity of nurses with the program, facilitates the development of personal relationships, trust and communication between the home visitors and physicians.
- The home visitors are knowledgeable about community resources and make social service referrals as needed.
- The size of the program and the advanced training of the nursing staff allow the home visitors to respond quickly to acute cases and provide high level care.
- After a home visiting case is "closed," the chart is combined with the patient's regular medical chart. The home visiting program is looking forward to full implementation of Kaiser Permanente's electronic medical records, which will facilitate record sharing further.[76]

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Strategy 4 Offer group well-child visits

Families learn parenting skills differently. Some may feel most comfortable and learn the most about their child's health and development in a typical, one-on-one appointment with a pediatrician or a pediatric nurse. But others may thrive in a cooperative setting, learning best by observing, listening to and sharing ideas with other families, in addition to a clinician. For these families, group well-child visits, which have been in use for at least 25 years,[77] can maximize the value of time with health professionals. Likewise, some clinicians may feel that they can help children and their families most effectively by meeting with them in a group setting.

In a typical group visit, about six families with children of the same age share a one-hour appointment. Perhaps the clinician will ask families about their experiences with an age-appropriate developmental challenge, such as how they cope with their two-year-olds' temper tantrums or how they feel about their one-year-olds' growing independence. Each child also receives immunizations and a basic physical examination.

Group visits take advantage of family-to-family communication and support. Just the experience of watching other young children can enlighten an anxious family: they can discover that every child and every family is unique and that no single "right" answer to complex parenting questions exists.

A Model: Dr. Lucy Osborn's Salt Lake City practice

For 18 years, Dr. Lucy Osborn was a pediatrician in group practice in Salt Lake City, Utah. Of all of her patients with newborns, 90 percent opted to participate in a group visit format. [See the story on page 21.]

Benefits & the bottom line

- In a study of group visits, families and pediatricians discussed nearly four times as many important parenting issues, as identified by the American Academy of Pediatrics, than during individual visits.[78]
- Group visits maximize capitated dollars, since the charge is the same as for individual visits, but families spend more time with the pediatrician.[79]
- Participants in group visits were 1.8 times less likely to seek advice between visits—with no adverse health effects for their children.[80]
- In one study, 90 percent of families participating in group visits kept all of their check-ups, compared to 72 percent of those seen in individual visits.[81]
- Eight out of 11 groups in one study showed their high satisfaction by asking to continue the group visit process after the study was completed.[82]
- Group visits may not be appropriate for all health care settings. Researchers found at one clinic that high-risk families using group visits kept significantly fewer of their scheduled appointments than those with individual visits (although, with make-up appointments, the overall number of kept visits was the same).[83] In addition, some clinics may not have enough space for group visits. In all cases, health plans should keep group visits voluntary and continue to offer individual well-child visits.

■ Strategies in practice: "We're healthy and normal!"

From the moment her obstetrician said something might be wrong with her pregnancy, Rosemary Brennan Curtin couldn't stop worrying. Her son's normal birth didn't allay her fears. She still found herself measuring him against other babies, trying to assess if he was "behind." She was driving herself crazy, she admits, even though her son, who quickly became known as Ace, was fine.

At Ace's two week visit, his pediatrician, Dr. Lucy Osborn, asked Rosemary if she would like to join a well-child group being formed at her Salt Lake City practice. The group of five to eight families would meet according to the American Academy of Pediatrics' well-child visit schedule. The sessions would last one hour plus about 10 minutes for a physical exam. Rosemary leapt at the opportunity.

"I know that part of the reason the experience was so positive was that Lucy is such a great pediatrician," Rosemary says. "But, I think that all first-time parents (and sometimes second-time parents) would appreciate group visits. I had the opportunity to ask all of my questions and talk with other parents about safety, child development, nutrition, sleeping problems and most importantly personal parenting experiences. Everyone had a parenting strategy to share, a common concern that generated a wealth of information. I became more informed, and therefore more confident in my ability to take care of my son. With the pre-scheduling, I always knew when the visit was going to be and Lucy's office sent me reminders a week before in case I forgot. Best of all, the group developed real friendships, giving us freedom to ask the hard questions all parents must deal with."

What does Rosemary feel is the best aspect of group visits? "Constantly being reassured that Ace and I are healthy and normal!"

For Dr. Lucy Osborn, the key to well-child visits is the new relationship between families and their primary care provider. "Families see me as a resource for parenting information, not just what to do if their baby has a cold. I can also emphasize to families how to use the health care system appropriately—what should happen during a well-child visit, when to use urgent care, and when to go to the emergency room. By spending an hour together, I am able to learn more about each family's strengths and the areas in which they may need extra support—and they are able to get to know and trust me, too." [4] ■

Strategy 5 Use questionnaires prior to a child's visit to identify parenting concerns[45]

Between well-child visits, families may face a variety of parenting challenges and may amass numerous questions and concerns about their child's development. Even if they have access to their pediatric primary care provider and other child development specialists over the telephone, the face-to-face benefits of a well-child visit make that time the most valuable. But much needs to happen during the visit: the child must be weighed and measured; age-appropriate screenings and immunizations must be administered; and timely guidance offered.

One strategy for maximizing the efficiency of a visit is to ask families to fill out a questionnaire about their developmental concerns prior to the well-child visit. There are a number of benefits to using questionnaires:

- Questionnaires set the tone that it is "all right" to raise behavioral issues, such as discipline. Families may otherwise self-censor for fear that their questions will label them as bad or incompetent parents.
- They can help families articulate their priorities and, assuming the pediatric clinician is responsive, help pediatric providers understand the unique concerns of each patient's family. Numerous authors have proposed an agenda for each well-child visit.[46] However, the standard topics may not include issues of pressing concern to a particular family.[47] By enabling families to help set the agenda for the visit, questionnaires help create a partnership between health professionals and families.[48]
- Questionnaires can raise important issues about adult health that affect children's health. Physical and mental illness can affect a family's responsiveness to their young child's behavioral cues. Studies have shown, for example, that children of mothers who are depressed or anxious have poorer health status, if the maternal condition is untreated.[49] However, it is important for clinicians to accept that some families may not feel comfortable discussing their own physical or mental health—and that this reluctance to participate does not necessarily indicate a family in crisis.

In order to be effective, questionnaires must reflect the characteristics of the patient population. For example, for low-literacy or non-English-speaking families, English language questionnaires will have little value. Pediatric providers will need to be sensitive to individual families' language capabilities, either by providing questionnaires in the family's primary language, offering assistance in filling out questionnaires or not using them in some circumstances.

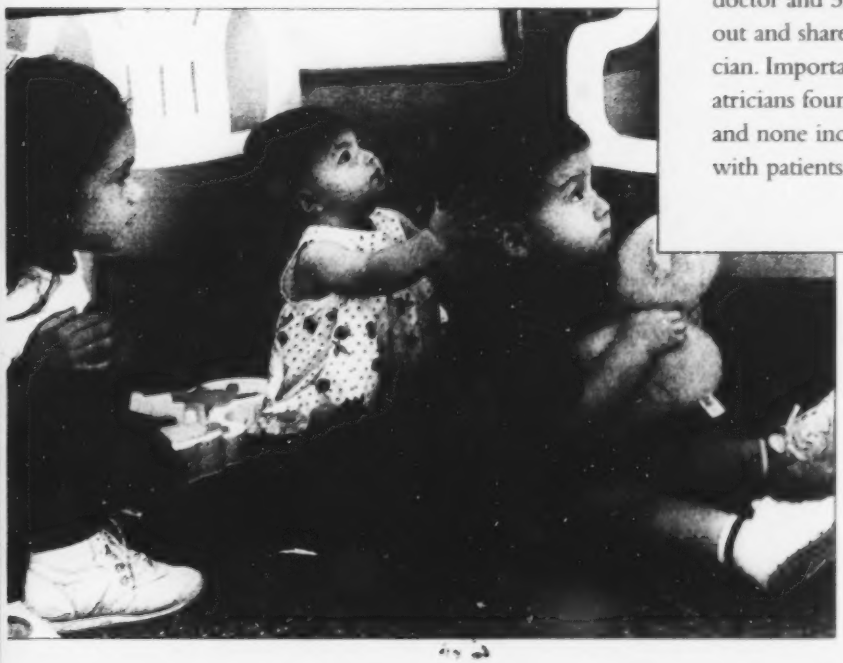
Pediatric providers can develop their own questionnaires or use existing resources. For example, Kaiser Permanente has developed, as part of its "Bright Futures"[50] project, age-appropriate questionnaires for use by pediatricians and adolescent providers. The questionnaire seeks to elicit information about families' knowledge of and behavior regarding important health and safety issues, such as how to prevent lead poisoning. There is also room in the questionnaire for families to raise other issues that they want to discuss.

■ A Model: Healthy Steps for Young Children at Humana (Kansas City)

Healthy Steps for Young Children is a national program of enhanced pediatric care. The comprehensive array of services includes "Linkletters" that are sent to families two weeks before scheduled visits and include (among other sections) questions for families about their child's behavior and development. Healthy Steps Specialist Carol Dietzschold says that the questionnaires are "a good centralizing point for discussions about child development." She emphasizes that the questionnaire is a useful tool that is used "in the context of the personal relationship between the providers and the families and that trusting relationship is essential to the success of Healthy Steps."[91] Researchers from Johns Hopkins University are conducting the formal evaluation of Healthy Steps; initial data will be available in late 1998.

Benefits & the bottom line

- The questionnaire provides health care providers with observations about the child's typical, everyday behavior to supplement their observations during well-child visits. This additional information can be crucial for providers who only see the child for a short time in a setting unfamiliar to the child.
- The questionnaire is presented to families in conjunction with information about common, age-appropriate child development advice and information, helping to reinforce the educational messages offered by the health care provider.
- One study found that families who did not fill out a questionnaire only discussed 30 percent of their concerns with their pediatrician. This number rose to 43 percent for the families who filled out the questionnaire, but did not show it to the doctor and 53 percent for those who both filled out and shared their responses with the pediatrician. Importantly, none of the participating pediatricians found the questionnaire burdensome and none increased the amount of time spent with patients as a result of its use.[92]



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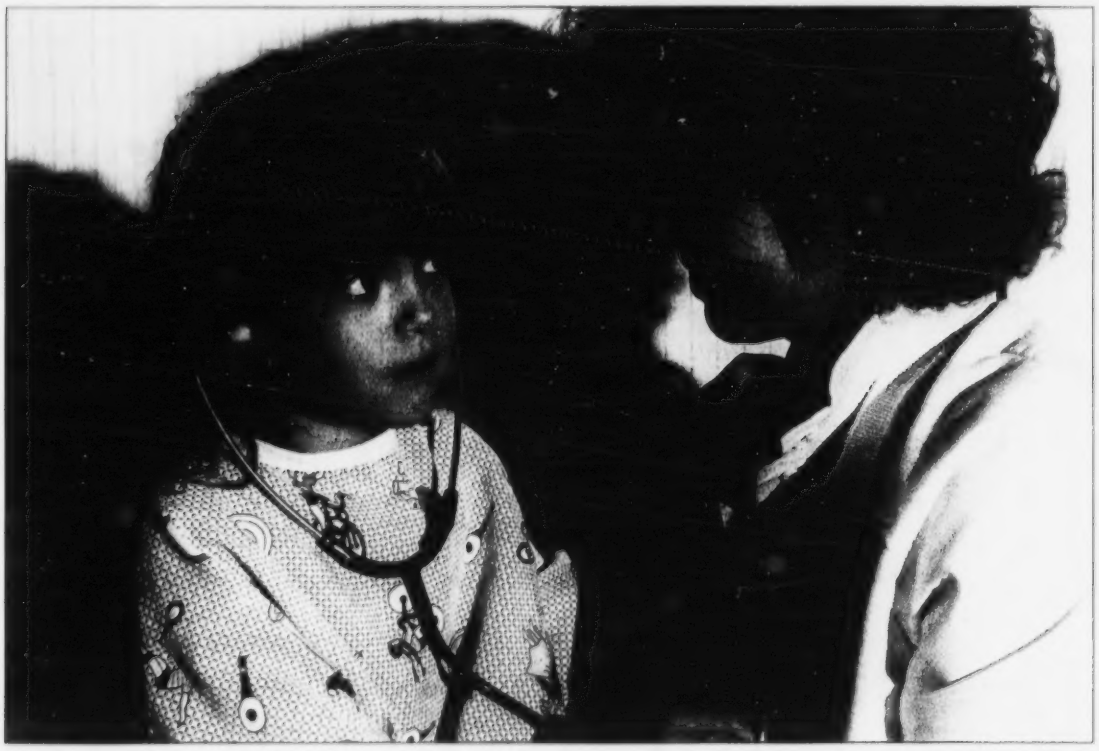
Strategy 6 Provide temperament assessment and follow-up services

"Temperament" refers to the innate way in which each individual consistently approaches his or her world. Most temperament traits appear in early infancy; almost all are quite apparent by three or four years of age:

- Some children are active or intense; others are quiet.
- Some are quite sensitive to noise, touch or temperature and react strongly to slight environmental changes; others are unaffected.
- Some get easily frustrated and give up easily; others are quite persistent.
- Some adapt quickly to novelty, change or intrusions; others take more time.[33]

A particular temperament is neither good nor bad, but families who misunderstand their child's temperament may become frustrated by their child's behavior. A toddler with low tolerance for change may meet new foods with protracted temper tantrums; an aggressive child who has just become mobile may be at high risk for running into the street.

Recognizing temperament is a crucial first step as families seek to nurture their child's unique developmental path. But families also need to learn how to interpret the abstract concepts of temperament—"sensitivity," "assertiveness," etc.—in terms of day to day behavior. In a study conducted at Kaiser Permanente (see page 25), families who received temperament counseling scheduled fewer discretionary (i.e. with a pediatric primary care provider) visits when their child was about a year old than



families who were not counseled. From discussions with the families, the authors hypothesize that the children whose families received counseling did not have fewer behavioral problems, but rather their families anticipated their child's frustrating behavior and felt more confident in their parenting role. As the authors write, "Parents who receive anticipatory guidance may not gain a magic solution but may gain more perspective, more patience and a greater sense of competence. By helping parents develop more realistic expectations, anticipatory guidance may also help prevent some normal temperament-related behavioral issues from becoming behavioral problems."[94]

■ A Model: The Preventive Ounce Temperament Program: Kaiser Permanente (Santa Rosa) and Cigna HealthCare of Arizona (Phoenix) implementations

In Kaiser Permanente's Santa Rosa, California clinic, from 1986 through 1989, just over 300 children and their families participated in a temperament counseling study. All participants completed a questionnaire regarding their four-month-old child's temperament, the results of which were placed in the child's medical chart. The experimental group received the results by mail, along with tailored anticipatory guidance. (Later implementations of the program included the availability of a temperament counselor.[95] Some clinics now use an on-line version of the temperament assessment questionnaire.[96])

Cigna HealthCare of Arizona's Phoenix clinics have used the Preventive Ounce's program for about ten years. More than 1200 children have participated in this program.[97]

Benefits & the bottom line

- In families who received counseling, "more active" children scheduled the same number of visits as their "less active" peers, whereas the "more active" children in the control group saw their doctor more often than their "less active" (and also uncounseled) peers.[97]
- The greatest decrease in the number of visits occurred when the children were just about a year old—the age when most children become mobile and verbal, causing many temperament-related issues to come to the fore.[98]
- In another study of the Temperament Program, two-thirds of participating pediatricians believed that it helped families and improved their pediatric practice and many families cited the Temperament Program as a positive factor in keeping their health plan membership.[99]
- One implementation of the Temperament Program cost approximately $5 per child to administer. If the program were expanded to the clinic's entire early childhood population, 10,000 children (the expected pool of participants) would have 15,000 fewer office visits—a theoretical savings of $630,000 per year. As the authors state, these savings may not appear in daily practice; however, the reduced number of visits will increase accessibility of medical providers.[100]

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Strategy 7 Provide access to child development support through a telephone system

During optimal well-child visits, families ask and receive answers to their child development questions. The frequent schedule of well-child visits ensures that families will have this opportunity at least 10 times in their child's first three years. However, questions and challenges about children's development may arise at any time.

One strategy to fill these gaps between visits is to provide families access to a "warm line" (called that to distinguish the service from crisis-oriented "hot lines"). A warm line is a telephone advice service that provides families with access to child development specialists. Given the range in children's temperaments and what is considered "typical" behavior, it is not surprising that 87 percent of families who have access to ongoing telephone support find it very useful.[101]

For some families, the telephone's anonymity makes it easier to use. They may be embarrassed to ask questions about parenting issues or afraid that clinicians will misinterpret their questions as a sign that they are bad caregivers. Receiving advice over the telephone may feel non-confrontational and safe. However, other families may not feel comfortable discussing parenting questions with a stranger and need ready access to their primary care provider.

In the examples highlighted below, each telephone warm line had the advantage of being affiliated with a hospital; this affiliation gave the warm line a prestige that encouraged callers to trust the advice given. A managed care organization would have the same prestige.

A Model: Parent Warmline

Parent Warmline, sponsored by Children's Hospitals and Clinics in Minneapolis, provides a call-back service to families about non-clinical, non-emergency child development and behavioral issues. The Warmline is staffed by volunteers who have a background in child development and is managed by a part-time coordinator. The volunteers receive an intensive training course, the costs of which are absorbed by the hospital. In 1995, the service responded to 2,300 calls from 125 zip codes. The average call length was 19 minutes.[102]

Benefits & the bottom line

- 50 percent of Warmline callers report that they have no other helpful resources for parenting education.
- 93 percent of callers surveyed agreed that Warmline helped them better understand their situation and 73 percent reported that their situation improved as a result of their call with the Warmline.
- 80 percent of callers surveyed reported that the Warmline helped relieve their stress. (The remaining 20 percent felt neutral about their stress level; no one reported that the Warmline increased their stress.)[103]
- A similar Warmline service run by Cedars-Sinai Medical Center in Los Angeles, California asks long-distance callers to pay for the cost of the call (which can last up to 45 minutes).[104]

Provide A Seamless System of Early Childhood Development Services[105]

The rapid pace of development from birth to age three brings both excitement and challenges to families. As their children learn to walk, for example, families need new information about safety and may be ambivalent about this sign of independence; families with toddlers often wonder when to begin toilet training. Other families may worry if important developmental milestones, such as communication, seem especially difficult for their child.

By offering a seamless system of child development services, managed care organizations can help families cope with these transitions and identify appropriate, newly tailored services and parenting support. A truly seamless system will facilitate transitions not only between services within the managed care organization (from obstetrics to pediatrics, for example), but also between the plan and community-based programs.

Research documents the influence of parental health on child health and well-being, making the link between pediatric and adult health services one of the most valuable for plans to strengthen. For example, children of depressed mothers themselves acted more depressed (with lower affect and energy), even when with nondepressed adults.[106] Children whose mothers or both parents are defined as "problem drinkers" have an increased risk of serious injury.[107]

A recent study of high-risk families also documents the importance of children's communities on their well-being. Researchers found that the amount of "social capital"—defined in the study as church affiliation, perception of personal social support and support within the neighborhood—was strongly correlated with the well-being of pre-schoolers.[108] Thus, managed care organizations, as they seek to prevent poor health outcomes, have a stake in helping families find support in their communities. Although they should not be expected to "fix" the social problems that plague children and families, health plans can become part of larger community health efforts by increasing the effectiveness and efficiency of these referrals.

Strategy 8 Begin parenting education in the prenatal period[109]

Families do not wait until the birth of their child to make important parenting decisions. How they were brought up and their peers' parenting experience all influence their parenting attitudes and practices. Health professionals can help families recognize their predispositions, decide which they feel are right and think carefully about those they want to unlearn.

A prenatal visit with a pediatric clinician can raise the pressing parenting issues that warrant early attention. Families can ask about newborn behavior and discuss concerns about nutrition, sleep, safety and other issues. Providers, as they learn more about each family, can make referrals to the range of professional and peer support services that are available through the health plan's network and in the community. Above all, the prenatal visit can help lay the foundation for this important, long-term relationship.

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One important health issue often decided prenatally is whether a mother will breastfeed or formula feed her infant.[110] Both obstetric and pediatric providers can help families understand the benefits of breastfeeding and overcome obstacles to its practice.

Another important emphasis of the prenatal visit is helping fathers to recognize their importance to their child's development.[111] The pediatric primary care provider can help integrate fathers into discussions about their child—their hopes, expectations and fears about what their child will be like and what role they would like to play in their child's life.

Finally, prenatal pediatric information may help families prepare to navigate the health care system once their baby is born. In one randomized, controlled study of inner city families, women who participated in a prenatal pediatric visit took their children to the emergency room 50 percent less than their control group peers.[112]

■ A Model: HealthPartners group prenatal class

The Minnesota-based HMO HealthPartners offers first-time parents a prenatal group visit with a pediatric primary care provider and a pediatric nurse, usually scheduled between 28 and 30 weeks into the pregnancy. The obstetrician serves as the link to the program. Between two and eight families attend the group visit, which lasts about one and a half hours. Topics covered include infant feeding issues, as well as the benefits of breast feeding; what to expect during the hospital stay; circumcision; jaundice and other neonatal/postnatal conditions; child safety; and the well-child and immunization schedules. The pediatrician and nurse team also take this opportunity to introduce expectant parents to the office staff, including providers, phone nurses and receptionists, and give a summary of their pediatric experience and areas of interest.[113]

Benefits & the bottom line

- The group visit format is an effective use of the providers' time, since most families ask the same basic questions. Families are encouraged to schedule individual appointments if they have questions or concerns that were not addressed during the group visit or if they feel uncomfortable with the group visit format due to privacy or other concerns.
- The group class serves as a clearinghouse for directing families to other specialized services, such as HealthPartners' outpatient breastfeeding clinic, and to classes about topics including breastfeeding, infant massage and returning to work.
- The group class provides families with the opportunity to get to know a pediatric primary care provider, whom they can then choose as their provider. When families have such a good understanding of their provider's perspectives and style, the chance of their satisfaction with the provider—and thus the chances for continuity in the relationship—increases. (Families can also choose any other available provider in the HealthPartners network based on word-of-mouth, in-person consultation or assistance from the health plan.)
- Although HealthPartners has not conducted a formal evaluation of the program, family satisfaction survey results are consistently high and health care providers feel that it is a good investment.

31

Strategy 9 Ensure scheduling of the first well-child visit prior to hospital discharge and follow-up as needed

Health care is a habit. Research has shown that missing one well-child appointment increases the risk for future missed appointments.[114] With the rapid course of early childhood development, and the important physical health services that occur during this time (such as immunizations), missed visits lead to a delay in timely preventive care. In one study of families with commercial health insurance, 10 percent failed to schedule their first well-child visit and 16 percent failed to keep their first well-child visit.[115]

The numbers are worse for at-risk populations. In the study cited above, 13 percent of families with Medicaid or no health insurance failed to schedule their first well-child appointment and 39 percent failed to keep it. In another study, only 38 percent of children from birth to 23 months had received the full number of well-child visits recommended by the American Academy of Pediatrics.[116] A third study found that 27 percent of low-income infants did not receive their first well-child visit in the appropriate time frame.[117]

Researchers have found that some populations are at increased risk for not scheduling or attending their first well-child visit:

- Low-income families with more than one child, which presumably makes child care arrangements necessary;[118]
- Low-income families without telephones, which makes scheduling and rescheduling appointments difficult;[119]
- Families in which the mother has a high school education or less, is a teenager or does not remember her introduction to the concept of well-baby care;[120] and
- Families who have not met the child's pediatric primary care provider (in this study, a pediatrician) prior to the child's birth.[121]

Health plans need to assess their own populations for these risk factors and approach the development of solutions accordingly. For example, plans with a highly literate membership could use written reminders for visits, but those that know that much of their population is not literate or does not own a telephone may have to make a significant investment to ensure that families make and keep appointments, such as a home visitor program.

■ A Model: Healthy Connections at Children's Hospital in Boston, MA

Healthy Connections is an infant mortality reduction program that draws from the Touchpoints philosophy developed by pediatrician Dr. T. Berry Brazelton. "Touchpoints" are predictable moments in child development that can cause an increase in family stress if unanticipated. By targeting these transitions, health care providers can teach families about their child's development and promote family well-being.[122]

Healthy Connections focuses on the Touchpoint of birth. Potential participants (high-risk pregnant women) are identified by prenatal clinics. A Healthy Connections nurse meets mothers in the hospital at the time of birth to assess family strengths and needs, begins to provide parenting education (in part through a low-literacy newborn care booklet) and schedules the first well-child visit. Depending on the new mother's length of stay in the hospital, the Healthy Connections nurse will meet with her from two to four times, helping to build the relationship between the mother and the nurse. The nurse calls the family 48 hours after discharge to check on their status. If the family misses a well-child visit, a community liaison conducts a home visit to re-establish the link between the family and the health care system, as well as help the family with any other social service needs.[123]

Ensuring that the first well-child visit is scheduled before hospital discharge is just one strategy used by Healthy Connections to enhance the family-provider link. By conducting the very first examination of the newborn in the presence of the family, Healthy Connections draws in the new family and assesses their strengths and challenges with caring for their baby. Moreover, involving the family in discussions about their child sets the tone for future interactions: that the family's concerns and opinions matter and that the health care providers will help with all aspects of newborn development.

Benefits & the bottom line

- The program documents a 44 percent increase in the number of kept one-month well-child visits and a 31 percent increase for the two-month visit, compared to the control group.[124]
- Program participants use the emergency room 75 percent less in the first month of life than their control group peers.[125]
- Primary care providers report that families are better prepared for the first well-child visit.[126]
- Healthy Connections nurses have noted positive effects of their focus on building strong relationships between families and the health care system, although only anecdotal evidence is available.[127]

Strategy 10 Encourage all health care providers and administrative staff to promote key child development messages

One element of a successful public health campaign is creating a simple message and repeating it often. Managed care organizations can complement existing efforts to promote healthy early childhood development by involving all staff in the delivery of key messages.

Part of what determines family satisfaction with their health care provider is their relationship with office staff. By encouraging staff to take an active role in the delivery of health messages, families may be more likely to view the system as "on their side."

■ Case study 1: Encourage families to read to their young children[128]

Forty percent of American fourth graders read at a "below basic" level,[129] more than 20 percent of adults perform at the lowest literacy level and an additional 25 percent have marginal functional literacy.[130] The problem is not limited to non-native English speakers: in the lowest literacy group, only one in four people is an immigrant who may just be starting to learn English.[131]

Health care providers have an important stake in helping to improve children's reading ability. Older children, teenagers and adults need to be able to read appointment slips, prescription bottles and educational brochures to take care of their own health and that of their dependents. In a study of health literacy, 42 percent of patients at two public hospitals could not read and understand basic medical instructions, such as the need to take a medicine on an empty stomach.[132]

Researchers agree that children's early literacy environment is critical to their later reading success.[133] Enjoyable experiences with books help mitigate the often frustrating task of learning to read. Reading aloud familiarizes young children with the cadence of language, an important step in language acquisition.

Reading can also have an important corollary benefit for children's development by enhancing their attachment to their family. The interaction that can occur during reading aloud is just as important to the child's well-being as the familiarization with letters and words. Even if adults in the family are beginning readers themselves, just using books as the springboard for talking with toddlers ("Can you point to the cat?") teaches them "pre-literacy" skills that will help them in the quest to read. If the important adults in their lives value books, so will children.

Finally, reading is a possible replacement for excessive television viewing. Researchers have demonstrated that even young children are affected by the violence that they see on TV.[134] By reading with their children, families model another source of entertainment.

Families may need help in creating a positive literacy environment for their children. Managed care organizations can introduce families to this important concept through programs such as the ones described below. They can also direct families to their local public library that may offer literacy services for children and adults. As with all educational messages, hearing that reading is important from multiple sources will enhance families' acceptance and implementation of the recommendation.

■ Two Models: Reach Out and Read & Reading Rx

The Reach Out and Read (ROR) program was first implemented at Boston Medical Center. This program uses volunteers to read to children as they wait for pediatric appointments. Then, pediatric providers "prescribe" reading during the visit and give each family an age appropriate book. ROR has been implemented in hundreds of sites, including children's hospitals, health maintenance organizations and corporations; funding is secured through grants and collaborations with local agencies.

A HealthPartners clinic in Minnesota is one of the first implementation sites for Reading Rx, a literacy promotion program developed by Dr. Hilary Stecklein, a HealthPartners pediatrician. There are four components to the program. First, health clinics set aside a corner of the waiting room as a book corner that has a rotating library of children's books. Second, take-home brochures provide information to families about the importance of reading, how to read aloud to children and suggestions for minimizing the amount of TV children watch. Third, children can become members of Reading Rx. The free membership includes reading-related gifts (as funding permits) and small prizes from public libraries and other community organizations. Fourth, health care providers and clinic staff receive training about the importance of reading and how to promote reading to families. Reading Rx is a nonprofit organization funded by grants.

Benefits & the bottom line

- A study of ROR found that mothers who received books were four times more likely to read to their children than mothers from the same socio-economic group who had not received any books.[135]
- Both Reading Rx and ROR are so well-integrated that children and families come to expect that books will play a role in their check-ups. As one ROR participant said, "Every time I brought [my daughter] to the clinic, the doctor gave us a book, so I figured he must want me to *do* something with them."[136]
- Both programs use the time families sit in waiting rooms to underscore the importance of reading. In Reading Rx, the clinic staff sign families up for program membership and answer questions about the book display. Reach Out and Read incorporates volunteer readers to promote the joy of reading.

■ Case study 2: Encourage breastfeeding

The benefits of breastfeeding to children, mothers and society are firmly established. A recent study concludes that breastfeeding is associated with "small but detectable increases in child cognitive ability and educational achievement," noting that these increases could be measured by different indicators of educational achievement into young adulthood.[137] Breastfeeding has also been linked to reductions in otitis media (ear infections), sudden infant death syndrome, allergies and asthma.[138] For mothers, breastfeeding has been demonstrated to lower the risk of ovarian cancer.[139] The social benefits encompass reductions in environmental waste from formula packaging, saved money from less parent absenteeism from work for their child's illnesses as well as others.

Two of the national health goals articulated in Healthy People 2000 are to increase initial breastfeeding to 75 percent and breastfeeding at six months to 50 percent.[140] The United States has a long way to go towards this goal: in 1995, only 59 percent of women were breastfeeding either exclusively or in combination with formula use at the time of hospital discharge and only 22 percent of mothers were nursing at six months.[141]

A major barrier to breastfeeding success can be hospital policies. Some health systems interrupt breastfeeding or contradict messages about its importance by providing families with free formula or coupons for discounts, feeding the newborn formula, rather than helping mothers learn to breastfeed, and failing to provide lactation information and support both prenatally and in the postpartum period. To counter these forces, the World Health Organization initiated the global "Baby Friendly Hospital Initiative" in 1992 that establishes ten criteria that hospitals must adopt in order to be certified as "baby friendly." As of 1997, only eleven hospitals in the United States had been certified.

■ A Model: Kaiser Permanente Hospital—Honolulu, Hawaii

Kaiser Permanente's Honolulu hospital became the second hospital in the United States to be officially designated as "baby friendly" as part of UNICEF's and the World Health Organization's "Baby Friendly Hospital Initiative" (BFHI). BFHI hospitals are required to meet ten standards, including having a written breast-feeding policy that is routinely communicated to all health care staff and training all health care staff in the skills necessary to implement this policy. As part of its BFHI, Kaiser Permanente's Honolulu hospital established training programs and broad-based educational campaigns for all staff.

Benefits & the bottom line

- From February 1994 to March 1997, breastfeeding at the time of mother-baby discharge from the hospital rose from 56 to 91 percent.[142]
- The percent of mothers still breastfeeding at six months increased from 25 percent in 1995 to 44 percent in 1996.[143]
- Hospital readmission of newborns less than seven days old is decreasing: the rate of readmission (total admissions/total deliveries) for the first-quarter has declined from 2.5 in 1995 to less than 1.5 in 1997.[144]

Strategy 11 Link community and social supports to pediatric primary care

All families need access to information, support and services to help them nurture their children's development. For some families, these needs may be compounded by community and family stresses. Homelessness, domestic violence and substance abuse, for example, all powerfully influence children's well-being and the ability of their families to take care of them.

While health care systems cannot fully address these societal problems, they can become a nexus of information, support and services about family and community health services. To do so effectively, plans need to understand the social service needs of their membership, uncover the gaps existing between services and develop a plan for bridging those gaps. Some plans may find that linking services to pediatric care, as done at Boston Medical Center, is the best means for ensuring that families receive the support they need.

■ A Model: Boston Medical Center's Pediatric Pathways to Success

As described on page 17 the Pediatric Pathways to Success program (which served as the model for Healthy Steps and is now known by that name) was based on an ecological model of pediatric care that recognizes the importance of family and community well-being to children's health. The families served by Boston Medical Center (BMC) have wide-ranging needs. For example, of all deliveries at BMC, 18 percent have been prenatally exposed to drugs, 4 percent are discharged to homeless shelters and 11 percent are born prematurely.[145]

To help families address these issues, the Pathways team included the clinician (pediatrician or nurse practitioner) and Family Advocate, with a child development specialist, attorney and substance abuse counselor available as back-up. Together, the team ensured that families had access to a range of social services, including WIC and cash aid, Medicaid, food pantries, housing and employment assistance, legal advocacy, drug treatment, smoking cessation programs and maternal health care.[146] Family Advocates played a lead role in this component of Pathways by, for example, helping to facilitate the relationship with the social service program or assisting families in applying for Medicaid or WIC. If referral to a community-based program was appropriate, the Family Advocates were able to accompany families for their appointments.

Benefits & the bottom line

- See page 17 for a description of the benefits of the Pathways program.

Strategy 12 Establish a system for referral follow-up

In the course of addressing a child's developmental needs, pediatric primary care providers may decide to refer the family to another provider either within the health plan or (depending on the health plan's rules and outside contracts) to another provider or program in the community. Unlike physical health referrals, behavioral and mental health referrals rely heavily on the clinician's ability to prepare the family for the referral, since a child's nonphysical developmental needs may be harder for the family to identify and understand than a physical ailment.[147] The stigma against mental health care may also inhibit some families from pursuing a referral.

Only providing families with the name and address of a health care provider or program does little to facilitate the success of the referral. Families may experience multiple barriers when trying to fulfill a referral for child development information, support or services. They may not believe that the referral is necessary or may feel ashamed for needing support. Families may feel disconnected to the cultural context of the new clinician or program. Their complex schedules (multiple jobs, child care, elder care, etc.) may create logistical problems and financing may pose a hardship.

Managed care organizations should establish systems to enable pediatric providers to track the results of referrals, particularly for children with serious developmental delays or highly stressed families. Both in-plan and out-of-plan referrals to child development services should be tracked, if believed necessary by the family or provider. If the first referral was unsuccessful, the clinician can work with the family to develop a more appropriate one or find a more helpful community resource. Any delay could cause a decrease in the family's motivation, support and resources for following through with the referral.[148]

A Model: Early Intervention follow-up provided by Harvard Vanguard Medical Associates

Harvard Vanguard Medical Associates (a nonprofit, multispeciality medical group) provides care primarily to members of Harvard Pilgrim Health Care. Harvard Vanguard's Developmental Consultation Service, in addition to providing clinical evaluation and consultation to Harvard Vanguard's pediatric clinicians, also monitors referrals made by the group practice's clinicians to Early Intervention (EI), a joint federal and state program that provides services to children from birth to age three who are experiencing or are at risk of experiencing developmental delays.[149] The Harvard Vanguard Early Intervention office matches notification of EI referrals from pediatric clinicians with authorization requests that providers submit to the health plan and with progress reports from community programs. Through database tracking, the EI office has the capacity to track families who may "fall through the cracks."[150]

Benefits & the bottom line

- Follow-up is systematic and thus assured: the centralized EI Office knows to step in if the paperwork reflects a breakdown in the referral process.
- The EI office serves as the information link between those who make referrals (including pediatric clinicians, speech pathologists and community child care providers) and the community programs that provide services. Both sides of this "see-saw" receive information from the EI office, facilitating consistency and coordination of information.
- Through the centralized EI office, the group practice can help ensure that patients receive the services prescribed by their health care providers.

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Strategy 13 Coordinate with state and community health services

In many communities, local or state government programs or nonprofit agencies provide important services to families with young children. Some, particularly those that have existed for many years, may have advantages not yet developed in newer health care organizations, such as effective outreach methods, culturally competent services and links to other community resources. Moreover, long-standing programs may have earned the trust of their neighborhood, maximizing their effectiveness.

Managed care organizations can coordinate with these programs, thereby enhancing services to families and avoiding resource duplication. In some cases, coordination can simply take the role of providing members and health professionals with a community resource list. In others, such as the example below, coordination would be enhanced by case management. In all cases health plans will need to determine which out-of-plan services they will fully reimburse, partially subsidize or exclude from the benefits package.

■ A Model: HealthSource/Westchester Prepaid Health Services Plan and Montefiore Medical Center's Safe House Program

Lead poisoning in young children is a dangerous result of developmentally appropriate behavior, specifically a toddler's tendency to explore the world by mouth. Ingesting lead can result in depressed IQ scores, increased risk of dropping out of high school and reading disabilities.[151] Although the incidence of lead poisoning has decreased due to new laws and community education, nine percent of children still have blood lead levels that exceed the safety threshold.[152] A 1998 GAO report concludes that about 352,000 children probably have high blood-lead levels but have not been tested.[153]

The HealthSource/Westchester Prepaid Health Services Plan has developed a case management program that both ensures that lead-poisoned children and their families receive the follow-up services they need and educates their network health professionals about the importance of lead testing. The case manager works with the Westchester County Department of Health, Early Intervention programs, the Committee for Preschool Special Education and lead treatment programs. One of these programs is Montefiore Medical Center's Lead Poisoning Prevention Project. In addition to lead treatment clinics, Montefiore offers the Safe House Program, which provides families with an alternate place to live while their housing is being deleaded, family-support services and education about important child health and safety issues.

Benefits & the bottom line

- Montefiore has established two lead clinics for children, depending on their degree of lead poisoning. In the "low-lead clinic," the focus is on detecting the source of lead poisoning and providing education about environmental, nutritional and lead poisoning prevention issues. The goal is to prevent further lead poisoning and thus the need for hospitalization and other specialized services. The same is true of the "high-lead clinic," with the addition of more intensive medical interventions, as indicated.[154]
- Montefiore repeatedly tests children's blood-lead levels. Only once children have had two normal readings three months apart are they considered "graduates" from the program.[155]
- HealthSource/ Westchester Prepaid Health Services Plan uses phone calls and outreach visits to follow up with families who miss or do not schedule appointments with Montefiore.[156]
- The Plan supplements Montefiore's lead treatment services with nurse home visiting that includes a developmental assessment and follow-up after hospitalization.[157]

■ Strategies in practice: Extending seamlessness into the community

On October 9, 1997, the Minneapolis-based managed care organization HealthPartners brought together nearly 600 people for a town meeting that focused on how community members and institutions can enhance young children's development.

Called SMART (Stimulate Minds at the Right Time), the one-day event included speakers and participants from Minnesota families, businesses, community agencies, government offices, health and educational organizations and others. As part of its effort to extend the reach of the conference message and results, HealthPartners worked with Minnesota magazines to print the proceedings.

Participants—who may never have met with the managed care organization before—left with concrete ideas and inspiration for dedicating some portion of their work to young children. Many have become involved with HealthPartners reading promotion programs (see page 32).

Others had experiences like Jeanne Vergeront, the past Vice President for Educational Projects at the Minnesota Children's Museum. "The Museum demonstrated its commitment to early childhood issues by sending six high-level staff members to participate in the conference. Since that event, we've been conscious of making our 'Preschool Tuesday' programs developmentally appropriate and based on important parenting messages. I've also had the opportunity to share what I learned at the conference with other children's museums that are working to translate what we know about early childhood into programs for families."[158] ■

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Establish An Early Childhood Development Monitoring System

Managed care organizations, as documented in this report, have many opportunities to support families in their parenting role. No single strategy is the perfect strategy. Rather, each managed care organization will configure a unique set of early childhood services, drawn perhaps from the menu provided in this report and possibly from other sources as well, according to their population and community.

Children Now has developed a template for this process, called an "Early Childhood Development Monitoring System." This template includes three key components: creating an Early Childhood Work Group with health plan administrators, providers and families; collecting important data; and reporting to membership about progress and next steps.

Early Childhood Work Group

The mission of the Early Childhood Work Group would be to (1) assess the current array of child development services; (2) create a plan of action for integrating new policies and programs; and (3) monitor its implementation. Work Group members would include health care providers, plan administrators and several families with young children. A sample plan of action is provided on page 41.

The inclusion of families in this Work Group is critical for ensuring that the health plan services both meet the needs of and are accessible to the membership. In addition to families, Work Group conveners should think broadly when considering membership, given the nature of child development services. Often, the delivery of these services requires a cooperative environment: pediatric primary care providers may have to collaborate with child development specialists; medical advice nurses may have to refer callers to a parenting warm line; administrative staff may have to integrate a longer group well-child visit into the daily schedule. Quality improvement efforts will benefit if approached by an equally multidisciplinary team.

In addition, Work Group participants should draw from the plan's highest ranks, both in terms of decision-making power and informal leadership qualities.

Once the Early Childhood Work Group has been formed, it will need to articulate a common understanding of its mission. One step that might help this process is to agree upon a set of managed care values. Children Now's Birth to Three & Managed Care Advisory Committee developed a sample set listed on page 42. Given the particular importance of communication for ensuring that these values are realized, the Advisory Committee created a set of communication principles. By enhancing communication among families, clinicans and administrators, plans can help families make informed choices and articulate their needs and expectations.

Data collection

One recommended action for the Work Group is to coordinate the collection of data about the need for early childhood development services and the effectiveness of existing programs. This information will not only inform the Work Group as it develops its action plan, but can also help purchasers of health insurance mark the plan's progress.

For data on the need for services, health plans can catalogue programs and survey members. They may also consider calling upon others to help gather this information. Businesses, for example, could survey employees who have young children enrolled in the managed care plan. Questions should address members' knowledge, use and evaluation of parenting resources offered by the health plan, as well as suggestions for other useful services. Family involvement in questionnaire design will enhance the usefulness of the survey by ensuring that questions will be readily understood.

With these data, the Work Group can determine which services are most wanted by members. Health plans that can demonstrate their ability to fulfill consumer requests will have a distinct competitive advantage.

Outcomes data can help health plans select programs for implementation and refine existing programs. Some data are provided throughout this report; over the next few years, as health plans intensify their implementation of early childhood development services, Children Now will continue to distribute outcomes data to help build this body of knowledge.

Using data to set health plan policies

Kaiser Permanente, the Centers for Disease Control and Prevention, Emory University School of Medicine and the University of Arizona Health Sciences Center collaborated on a study about the impact of adverse childhood experiences on adult health.[159] The research found a "strong and cumulative" link between a child's experiences of abuse, neglect or violence and that child's health risks (such as smoking, alcoholism and obesity) later in life. For example, adults with four or more adverse childhood experiences were more than seven times more likely to be alcoholics and ten times more likely to use injected drugs than adults with no such experiences. This data played a significant role in Kaiser Permanente's decision to join the Healthy Steps project, which provides enhanced pediatric care during early childhood and strong parenting support. As the authors of the study wrote, "If [pediatric approaches like Healthy Steps] can be replicated and implemented on a large scale, the long-term benefits may include, somewhat unexpectedly, substantial improvements in overall adult health."

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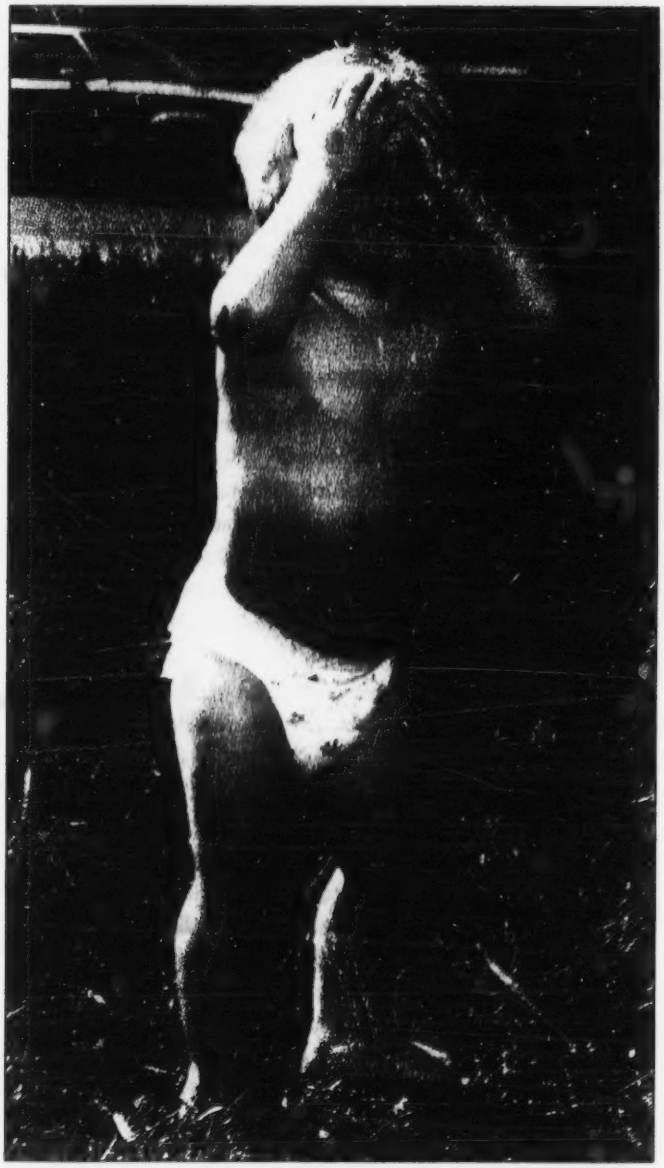

Reporting to membership

An Annual Report to the health plan's membership and to purchasers can relay the successes and challenges to enhancing child development services. The Annual Report would include the data that the health plan collected (both internally and from participating businesses), as well as a summary of the strategies that have been implemented.

In addition, Children Now intends to function as an information center for health plans that agree to implement some or all of the strategies included in this report. Through various information tools, Children Now will share practical implementation tips, as well as highlights of recent child development research. The Work Group could serve as the contact point for communicating with Children Now about the steps taken by that particular health plan and could serve as the dissemination point for information amongst health plan providers, administrators, families and businesses. ■

A model action plan for the Early Childhood Development Work Group

1. Adopt a set of **managed care values** and **communication principles** as parameters for the work of the Work Group. The models developed by Children Now (located on page 42 of this report) may serve as a good starting point.
2. Create an **inventory** of existing programs and policies that address child development issues. The Work Group can use this list not only to identify services that are missing, but also to demonstrate that child development services are already an accepted part of the managed care plan.
3. To supplement the inventory, conduct **interviews** with people drawn from the managed care organization's membership, health care providers and administrators from different departments and facilities, as well as community leaders, as to the potentially beneficial services that may be lacking.
4. Develop a **plan of action** for improving the managed care plan's support to families regarding their child's early development. Seek early approval of this plan from the leadership of the managed care plan. Every effort should be made to coordinate new programs with existing services to create a seamless system of care. This report can serve as a starting point for developing new programs.
5. Develop a **budget** for implementing the action plan.
6. Develop a **timeline** for implementing one or more child development services. Inform the managed care plan's membership when the new programs are available.
7. Develop a process for **assessing the quality** and cost effectiveness of the program, after the initial implementation period. (See the description of the Data Collection component on page 39.)
8. Inform managers when the new programs should be incorporated into **performance evaluation** of staff.
9. Consider **incorporating the communication principles** into all staff's performance evaluations and ensure that a mechanism for securing consumer input about staff members' communication skills is established.
10. Work with **Member Services** to ensure that the changes to the health plan's administration and benefits are reflected in benefits package language.
11. When appropriate, conduct another **needs assessment** to continue the quality improvement process.

Involving families is critical for success

As a health plan develops and monitors its system of early childhood services, ongoing involvement of health plan families will help ensure that decisions reflect members' needs and experiences. Montefiore Medical Center in the Bronx has a multi-faceted family-centered care initiative, which includes the Family Advocate program (see page 16), the installation of a Family Learning Place and the involvement of families in the development of a new children's hospital. Participating families will receive training in the process of hospital of design, while hospital staff, architects and other consultants learn about how to collaborate effectively with community members. "Family participation in the design of our new children's hospital and our other family-centered care activities is crucial in ensuring that we provide facilities and programs that meet the needs of our children and their families," says Gregory Burke, Vice President of Planning at Montefiore Medical Center.

Continued

Model values and principles

Child and family health values

- **Family-centered.** Managed care organizations will acknowledge and support the commitment, expertise, responsibility and full participation of families regarding all aspects of (1) their children's care and (2) the decisions that affect the whole membership of the managed care organization.
- **Accessible and community-based.** Managed care organizations will enable families to access services within the health plan and the community through timely, culturally competent mechanisms. Pediatric services may serve as a route for identifying the health needs of other family members.
- **Comprehensive, Coordinated & Affordable.** Managed care organizations will recognize the diversity of children's needs and offer families a coordinated, comprehensive set of benefits at a reasonable cost.
- **Community-focused.** Managed care organizations, in recognition that members' health is affected by their community, will participate in the development and maintenance of safe and healthful environments for children and families.
- **Quality.** Managed care organizations will provide services that meet accepted quality and safety standards and are delivered in collaboration with families. Managed care systems will provide leadership and include families in efforts to develop pediatric quality standards.

Communication principles

- **Equal.** All participants should feel that they have an equal right to participate and an equal responsibility to listen.
- **Individualized.** Communication should begin with an assessment of all participants' knowledge, attitudes and skills and then accommodate the participants' unique strengths, capacities and needs.
- **Culturally competent.** Communication should accommodate family language and cultural characteristics.
- **Comprehensive.** No limits should be placed on the content of family-provider communication.
- **Timely.** Communication should occur in anticipation of and in prompt response to children's and families' needs.
- **Interdisciplinary.** Communication should involve all appropriate participants, as determined by families and providers.
- **Collaborative.** Communication should help build collaborations among families, the multiple service points within the health plan, health plan administrators and the community.
- **Continuous.** Communication should occur within the context of long-term relationships between families and providers.
- **Recorded.** Key information should be recorded and then made available to the child's family (with assistance as needed in understanding it) and to appropriate providers.
- **Confidential.** All communication should respect participants' ethical and legal rights to confidentiality.

Right Time, Right Place

This report demonstrates that managed care organizations can support and enhance the ability of families to nurture their young children's development and suggests opportunities for plans to fulfill this role. Purchasers of health insurance could use their influence to encourage the inclusion of early childhood development services in the plans that they purchase.

Children Now, in authoring this report, intended the strategies to be practical. Each is illustrated by real-life applications and most are buttressed by evidence. The final recommendation outlines a process for health plans and families to develop and implement an action plan.

Four themes are woven throughout this report. First, early childhood development is critical to later development. The period from birth to age three presents a series of opportunities for promoting appropriate social, cognitive, emotional as well as physical growth. The two goals in this report—to create an early childhood development infrastructure and to provide a seamless system of early childhood development services—can help managed care plans organize their approach to this critical topic.

Second, families can play an essential role not only in nurturing their own child's development, but also in helping a managed care plan create an environment that supports all families. At the same time, families' involvement enhances their satisfaction with the health plan and sense of responsibility for their health care.

Third, good communication among health plans, health care providers, communities and families is key to promoting the healthy development of children. Health care systems can be confusing and intimidating or they can be places of empowerment and trust. Communication is a critical factor differentiating the two.

Finally, the integration of child development services, the involvement of families and the establishment of good communication require commitment from leaders. Individual health care providers and individual families cannot influence the system if the system rebuffs innovation. Leadership, in setting priorities, should focus on early childhood development.

Children Now looks forward to providing health plans, the purchasing community and families with additional information as they work together to enhance early childhood development services. ■

46

Endnotes

[1] Seventy-seven percent of Americans and their dependents who have employer-based insurance are enrolled in a managed care plan, as are forty percent of all Medicaid recipients. Mercer/ Foster Higgins employer survey quoted in Brink, S, Shute, N. (1997). American's Top HMOs. *US News & World Report*. October 13: 60-78. Zuckerman, S et al. (1997). *Questions for States as They Turn to Medicaid Managed Care*. Washington, DC: The Urban Institute.

[2] This section generally: Shore, R. (1997). *Rethinking the Brain: New Insights into Early Development*. New York, NY: Families & Work Institute.

[3] Zeanah, CH et al. (1997). Infant Development and Developmental Risk: A Review of the Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry*. 36(2):165-178.

[4] To avoid the awkwardness of "he or she," and yet describe children of both genders, we switch between the two.

[5] The Commonwealth Fund. (1996). *Survey of Parents with Young Children*. New York, NY: The Commonwealth Fund.

[6] *ibid*.

[7] *ibid*.

[8] ZERO TO THREE. (1997). *Nationwide Survey Among Parents of Zero-To-Three-Year-Olds*. Washington, DC: ZERO TO THREE.

[9] *ibid*.

[10] In this document, "health care provider" includes physicians, nurses, health educators and other health professionals who care for children and families.

[11] American Academy of Pediatrics. (1995). Recommendations for Preventive Pediatric Health Care. *Pediatrics*. 96(2):373-374.

[12] Dworkin, PH. (1993). Ready to Learn: A Mandate for Pediatrics. *Developmental and Behavioral Pediatrics*. 14(3):192-196.

[13] For an overview of managed care see: Freund, DA, Lewitt, EM. (1993). Managed Care for Children and Pregnant Women: Promises and Pitfalls. *Future of Children*. 3(2):92-122.

[14] In this report, "managed care plan" and "health plan" are used interchangeably to refer to a prepaid, integrated health care delivery system.

[15] Mercer/ Foster Higgins employer survey quoted in Brink, S, Shute. (October 13, 1997).

[16] Zuckerman, S et al. (1997).

[17] This section generally: Shore, R. (1997).

[18] Zeanah, CH et al. (1997).

[19] Rogan, WJ. (1995). Environmental Poisoning of Children—Lessons from the Past. *Environmental Health Perspectives*. 103(Suppl 6):19-23.

[20] Shore, R. (1997).

[21] Brazelton, TB. (1995). Working with Families: Opportunities for Early Intervention. *Pediatric Clinics of North America*. 42(1):7.

[22] Snow, CE. (1977). The Development of Conversation Between Mothers and Babies. *Journal of Child Language*. 4: 1-22. Nash, JM. Fertile Minds. *Time*. February 3, 1997:48-56.

[23] Shore, R. (1997).

[24] For a summary of research on cortisol see Zeanah, CH et al. (1997) and Shore, R. (1997).

[25] Hutcheson, JJ et al. (1993). Developmental Differences in Interactional Characteristics of Mothers and Their Children with Failure to Thrive. *Journal of Pediatric Psychology*. 18(4):453-466.

[26] Groves, BM et al. (1993). Silent Victims: Children Who Witness Violence. *Journal of the American Medical Association*. 269(2):262-264.

[27] Zuckerman, B et al. (1995). Silent Victims Revisited: The Special Case of Domestic Violence. *Pediatrics*. 96(3):511-513.

[28] American Academy of Pediatrics Committee on Communications. (1995). Media Violence. *Pediatrics*. 95(6):949-951.

[29] In this document, "health care provider" includes physicians, nurses, health educators and other health professionals who care for children and families.

[30] American Academy of Pediatrics. (1995). Recommendations for Preventive Pediatric Health Care. *Pediatrics*. 96(2):373-374.

[31] Data collected by the Department of Quality & Utilization, Kaiser Permanente Northern California, 1997. For children birth to one, there are 11.2 visits (compared to 6-7 visits recommended by the AAP); one to two, 7.4 visits (3 visits recommended); and two to three, 4.1 visits (compared to 1 visit recommended).

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[32] Dworkin, PH. (1993). Ready to Learn: A Mandate for Pediatrics. Developmental and Behavioral *Pediatrics*. 14(3):192-196.

[33] March 1996 Current Population Survey, US Bureau of the Census, compiled by the National Center for Children in Poverty.

[34] The Commonwealth Fund. (1996).

[35] Carnegie Corporation of New York. (1994). *Starting Points: Meeting the Needs of Our Youngest Children*. New York, NY: Carnegie Corporation of New York.

[36] *ibid*.

[37] Guyer, B et al. (1997). Annual Summary of Vital Statistics—1996. *Pediatrics*. 100(6):905-918.

[38] Bearer, CF. (1995). Environmental Health Hazards: How Children Are Different From Adults. *The Future of Children*. 5(2):11-26.

[39] Needleman, HL et al. (1990). The Long-Term Effects of Exposure to Low Doses of Lead in Childhood: An 11-Year Follow-up Report. *New England Journal of Medicine*. 322(2):83-88. Needleman, HL, Gatsonis, CA. (1990). Low-Level Lead Exposure and the IQ of Children. *Journal of the American Medical Association*. 263(5):673-678.

[40] Woodruff, TJ. (1997). Air Pollution and Infant Mortality. *Environmental Health Perspectives*. 105(6):608-612.

[41] National Academy of Sciences/National Research Council. (1993). *Pesticides in the Diets of Infants and Children*. Washington: National Academy Press.

[42] Murray, L, Cooper, PJ. (1997). Effects of Postnatal Depression on Infant Development. *Archives of Disease in Childhood*. 77(2):99-101.

[43] Bijur, PE et al. (1992). Parental Alcohol Use, Problem Drinking, and Children's Injuries. *Journal of the American Medical Association*. 267(23):3166-3171.

[44] For an overview of managed care see: Freund, DA, Lewitt, EM. (1993).

[45] Mercer/ Foster Higgins employer survey quoted in Brink, S, Shute, N. (October 13, 1997).

[46] Zuckerman, S et al. (1997).

[47] The Commonwealth Fund. (1996).

[48] *ibid*.

[49] *ibid*.

[50] ZERO TO THREE. (1997).

[51] *ibid*.

[52] Several other organizations have developed recommendations regarding health care services for young children and their families, including: Green, M (ed). (1994). *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Alexandria, VA: National Center for Education in Maternal and Child Health and Carnegie Corporation of New York. (1994). *Starting Points: Meeting the Needs of Our Youngest Children*. New York, NY: Carnegie Corporation of New York. See the endnotes for notations of major similarities between these recommendations and the strategies presented in this report.

[53] Ferris, TG et al. (1998). Changes in the Daily Practice of Primary Care for Children. *Archives of Pediatric and Adolescent Medicine*. 152(3):227-233.

[54] Lavigne, JV et al. (1993). Behavioral and Emotional Problems Among Preschool Children in Pediatric Primary Care: Prevalence and Pediatricians' Recognition. *Pediatrics*. 91(3):649-655. MacPhee, D. (1984). The Pediatrician as a Source of Information about Child Development. *Journal of Pediatric Psychology*. 9(1):87-100.

[55] Brazelton, TB. (1995).

[56] Adapted with permission from Jones, M, Littman, CL. (1997). Reflections on Becoming a Child Development Specialist in a Primary Pediatric Setting. *ZERO TO THREE*. 17(6):8-15.

[57] Another part of the pilot placed a child development specialist in a suburban group practice. Contact ZERO TO THREE for more information.

[58] The Healthy Steps for Young Children program also includes a "Healthy Steps Specialist" who serves a similar role as the Developmental Specialist. See page 23 for more information.

[59] ZERO TO THREE. (Unpublished document). *Developmental Specialist in Pediatric Practice Project*.

[60] Eggbeer, L et al. (1997). ZERO TO THREE's Developmental Specialist in Pediatric Practice Project: An Important Support for Parents and Young Children. *ZERO TO THREE*. 17(6):3-8.

[61] Kaplan-Sanoff, M. (1995). Pediatric Pathways to Success: The Power of Pediatric Practice to Support Families. *ZERO TO THREE*. 16(1):12-17.

[62] *ibid*.

Endnotes (continued)

[63] Kaplan-Sanoff, M et al. (1997). Enhancing Pediatric Primary Care: Cost Lessons Learned from Pediatric Pathways to Success. *ZERO TO THREE*. 17(6):34-36.

[64] *ibid.*

[65] Kaplan-Sanoff, M. (1995).

[66] *ibid.*

[67] Kaplan-Sanoff, M et al. (1997).

[68] See also Carnegie Corporation, pp. 70-73 and Green, M (ed), p. 119. Home visiting is also a strategy recommended by the American Academy of Pediatrics.

[69] Krugman, RD. (1993). Universal Home Visiting: A Recommendation from the US Advisory Board on Child Abuse and Neglect. *The Future of Children*. 3(3):184-191.

[70] Olds, DL et al. (1986). Preventing Child Abuse and Neglect: A Randomized Controlled Study of Nurse Home Visiting. *Pediatrics*. 78(1):65-78.

[71] Olds, DL et al. (1997). Long-term Effects of Home Visitation on Maternal Life Course and Child Abuse and Neglect. *Journal of the American Medical Association*. 278(8):637-643.

[72] Kitzman, H et al. (1997). Effect of Prenatal and Infancy Home Visitation by Nurses on Pregnancy Outcomes, Childhood Injuries and Repeated Childbearing: A Randomized Controlled Trial. *Journal of the American Medical Association*. 278(8):644-652.

[73] Weiss, HB. (1993). Home Visits: Necessary but Not Sufficient. *The Future of Children*. 3(3):113-128.

[74] The Commonwealth Fund. (1996).

[75] Study conducted by Kaiser Permanente's Rocky Mountain Perinatal Home Care Department, 1997.

[76] This section generally based on interviews with Carol Grunfeld, MS, RN, NP, Director, Perinatal Home Care Department.

[77] See for example Feldman, M. (1974). Cluster Visits. *American Journal of Nursing*. 74(8):1485-1488.

[78] Dodds, M et al. (1993). Group Health Supervision Visits More Effective Than Individual Visits in Delivering Health Care Information. *Pediatrics*. 91(3):668-670.

[79] Osborn, LM, Woolley, FR. (1981). Use of Groups in Well Child Care. *Pediatrics*. 67(5):701-706.

[80] *ibid.*

[81] *ibid.*

[82] *ibid.*

[83] Taylor, JA. (1997). A Randomized Controlled Trial of Group Versus Individual Well Child Care for High-risk Children: Maternal-Child Interaction and Developmental Outcomes. *Pediatrics*. 99(6):e9.

[84] This story was developed from interviews with Ms. Curtin and Dr. Osborn.

[85] See also Green, M (ed), p. xx.

[86] See for example Brazelton, TB. (1992). Green, M (ed). (1994).

[87] Stickler, GB, Simmons, PS. (1995). Pediatricians' Preferences for Anticipatory Guidance Topics Compared with Parental Anxieties. *Clinical Pediatrics*. 34(7):384-387.

[88] Green, M (ed), p. xxiv.

[89] Murray, L, Cooper, PJ. (1997).

[90] The other components of Bright Systems are a Provider Practice Survey, Speed Charting, Healthy Kids/ Healthy Futures health education and Provider Information Sheets.

[91] Interview with Carol Dietzschold, Healthy Steps Specialist.

[92] Triggs, EG, Perrin, EC. (1989). Listening Carefully: Improving Communication about Behavior and Development. *Clinical Pediatrics*. 28(4):185-192.

[93] Correspondence with James Cameron, PhD, Executive Director of the Preventive Ounce.

[94] Cameron, JR et al. (1994). Evaluating the Clinical and Cost Effectiveness of a Temperament-Based Anticipatory Guidance Program for Parents of Infants in a Health Maintenance Organization. Presented at the 10th Occasional Temperament Conference; October 20-22, 1994, Berkeley, California.

[95] Rosen, DL et al. (1996). The Temperament Program: Children's Preventive Mental Health Program. *HMO Practice*. 10(3):140-142.

[96] Correspondence with James Cameron, PhD, Executive Director of the Preventive Ounce.

[96a] Interviews with Sally Lashway, Child Development Specialist, Cigna HealthCare of Arizona in Phoenix and James Cameron, PhD, The Preventive Ounce.

[97] Cameron, JR et al. (1994).

[98] *ibid.*

[99] Rosen, DL et al. (1996).

[100] *ibid.*

[101] The Commonwealth Fund. (1996).

[102] Children's Hospitals & Clinics. Parent Warmline 1995 fact sheet.

[103] All statistics from: Hennighausen, K. (1997). *Results of Parent Warmline Satisfaction Survey*. (Unpublished document.)

[104] Interview with Helen Reid, Clinical Coordinator, Early Childhood Center, Cedar Sinai Hospital.

[105] See also Green, M (ed), p. xx.

[106] Field, T et al. (1998). Infants of Depressed Mothers Show "Depressed" Behavior Even with Nondepressed Adults. *Child Development*. 59(6):1569-1579.

[107] Bijur, PE et al. (1992).

[108] Runyan, DK et al. (1998). Children Who Prosper in Unfavorable Environments: The Relationship to Social Capital. *Pediatrics*. 101(1):12-18.

[109] See also Green, M (ed), p. 13. Prenatal parenting education is also recommended by the American Academy of Pediatrics.

[110] Ekwo, EE et al. (1983). Factors Influencing Initiation of Breast-feeding. *American Journal of Diseases in Children*. 137(8):375-377. Sarett, HP et al. (1983). Decisions on Breast-feeding or Formula Feeding and Trends in Infant-feeding Practices. *American Journal of Diseases in Children*. 137(8): 719-725.

[111] Green, M (ed). (1994).

[112] Serwint, JR et al. (1996). A Randomized Controlled Trial of Prenatal Pediatric Visits for Urban, Low-income Families. *Pediatrics*. 98(6):1069-1075.

[113] Interview with Dr. Teresa Kovarik, HealthPartners.

[114] Jonas, S. (1971). Appointment Breaking in a General Medical Clinic. *Medical Care*. 9(1):82-88. Goldman L et al. (1982). A Multivariate Approach to the Prediction of No-Show Behavior in a Primary Care Center. *Archives of Internal Medicine*. 142(3):563-567.

[115] Grossman, LK et al. (1996). Continuity of Care Between Obstetrical and Pediatric Preventive Care: Indicators of Nonattendance at the First Well-Child Appointment. *Clinical Pediatrics*. 33(5):563-569.

[116] Brown, J et al. (1993). Missed Opportunities in Preventive Pediatric Health Care: Immunizations or Well-child Care Visits? *American Journal of Diseases of Children*. 147(10):1081-84.

[117] Specht, EM, Bourguet, CC. (1994). Predictors of Nonattendance at the First Newborn Health Supervision Visit. *Clinical Pediatrics*. 33(5):273-279.

[118] *ibid.*

[119] *ibid.*

[120] Grossman, LK et al. (1996).

[121] *ibid.*

[122] Brazelton, TB. (1992).

[123] Interview with Dr. Constance Keefer, Child Development Unit, Children's Hospital and Karl, D et al. (In press). Healthy Connections: A Relational Model to Extend Primary Care into the Perinatal Period. *Journal of Pediatric Health Care*.

[124] Becker, M et al. (In press). Evaluation of a Program to Improve the Transition from Birth Hospital to Primary Care, *Ambulatory Child Health*.

[125] Becker, M et al. (In press).

[126] Interview with Dr. Constance Keefer, Child Development Unit, Children's Hospital.

[127] Karl, D et al. (In press).

[128] See also *Starting Points*, p. 75.

[129] US Department of Education, Office of Educational Research and Improvement. *NAEP 1994 Reading Report Card for the Nation and the States*. "Below basic" indicates that students cannot demonstrate an understanding of the overall meaning of what they read.

[130] Davis, TC et al. (1996). How Poor Literacy Leads to Poor Health Care. *Patient Care*. 30(16):94-127.

[131] *ibid.*

[132] Williams, M et al. (1995). Inadequate Functional Health Literacy Among Patients at Two Public Hospitals. *Journal of the American Medical Association*. 274(21):1677-82.

[133] Needlman, R et al. (1991). Clinic-Based Intervention to Promote Literacy: A Pilot Study. *American Journal of Diseases of Children*. 145(8):881-884.

[134] Shelov, S et al. (1995). Media Violence. *Pediatrics*. 95(6):949-951.

[135] Needlman, R et al. (1991).

[136] *ibid.*

[137] Horwood, LJ, Fergusson, DM. (1998). Breastfeeding and Later Cognitive and Academic Outcomes. *Pediatrics*. 101(1):e9.

[138] As summarized in International Lactation Consultation Association (1994). *Position Paper on Infant Feeding*. Chicago, IL: International Lactation Consultation Association. Cunningham, AS et al. (1991). Breast-feeding and Health in the 1980s: A Global Epidemiologic Review. *Journal of Pediatrics*. 118(5):659-66; Merrett, TG et al. (1988). Infant Feeding and Allergy: Twelve-Month Prospective Study of 500 Babies Born in Allergic Families. *Annals of Allergy*. 61 (6 Pt 2):132-20. Teele, DW et al. (1989). Epidemiology of Otitis Media During the First Seven Years of Life in Children in Greater Boston: A Prospective Cohort Study. *Journal of Infectious Diseases*. 160(1):83-93. Duncan, B et al. (1993). Exclusive Breastfeeding for At Least 4 Months Protects Against Otitis Media. *Pediatrics*. 91(5):867-72. Ford, RPK et al. (1993). Breastfeeding and the Risk of Sudden Infant Death Syndrome. *International Journal of Epidemiology*. 22(5):885-890. There are a few exceptions when breastfeeding is not in the best interest of the infant.

[139] As summarized in International Lactation Consultation Association (1994). Gwinn, ML et al. (1990). Pregnancy, Breast Feeding, and Oral Contraceptives and the Risk of Epithelial Ovarian Cancer. *Journal of Clinical Epidemiology*. 43(6):559-568.

[140] US Department of Health and Human Services. (1990). *Healthy People 2000*. Washington, DC: US Department of Health and Human Services.

[141] US Department of Health and Human Services. (1993). *Health, United States*, 1992. Washington, DC: US Government Printing Office.

[142] Data provided by Melodee Deutsch, Nurse Executive for Maternal and Child Health Services, Kaiser Permanente Honolulu Hospital Administration.

[143] *ibid.*

[144] *ibid.*

[145] Kaplan-Sanoff, M. (1995).

[146] *ibid.*

[147] Howard, BJ. (1995). The Referral Role of Pediatricians. *Pediatric Clinics of North America*. 42(1):103-119.

[148] Howard, BJ. (1995).

[149] Early Intervention is an entitlement program. In Massachusetts, health insurers are required to pay the first $3,200 of medically necessary services.

[150] This section from interviews with Dan Olsten, Developmental Consultation Services and Early Intervention, Harvard Vanguard Medical Associates.

[151] Needleman, HL et al. (1990). The Long-Term Effects of Exposure to Low Doses of Lead in Childhood: An 11-Year Follow-up Report. *New England Journal of Medicine*. 322(2):83-88. Needleman, HL, Gatsonis, CA. (1990). Low-Level Lead Exposure and the IQ of Children. *Journal of the American Medical Association*. 263(5):673-678.

[152] Brody DJ et al. (1994). Blood Lead Levels in the US Population. Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988-1991). *Journal of the American Medical Association*. 272(4):277-284.

[153] United States General Accounting Office. (1998). *Medicaid: Elevated Blood Lead Levels in Children*. Washington, DC: GAO. (GAO/HEHS-98-78)

[154] Interview with Nancy Redky, Montefiore Medical Center's Lead Poisoning Prevention Program.

[155] *ibid.*

[156] Interview with Sheila McGlone, RN, Case Manager Specialist, HealthSource/ Westchester Prepaid Health Services Plan.

[157] *ibid.*

[158] Interviews with Jeanne Vergeront, past Vice President for Educational Projects at the Minnesota Children's Museum and with Patti Hague, Director of Community Relations, HealthPartners.

[159] Felitti, VJ et al. (In press). The Relationship of Health Risk Behaviors and Diseases Associated with Leading Causes of Death in Adulthood to Childhood Abuse and Household Dysfunction: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*.

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On-site Social Supports
see Family Advocate

Lead Poisoning Prevention
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Montefiore Medical Center
Lead Poisoning Prevention Project
111 East 210th Street
Bronx, NY 10467
(718) 547-2789

These organizations, and many others not listed here, can also serve as resources regarding early childhood development services in managed care organizations:

American Academy of Pediatrics
141 Northwest Point Blvd.
PO Box 927
Elk Grove Village, IL 60009-0927
(847) 228-5005
www.aap.org

American Association of Health Plans
1129 20th Street, NW
Suite 600
Washington, DC 20036
(202) 778-3200
www.aahp.com

Association of Maternal and Child Health Programs
1220 19th Street, NW
Suite 801
Washington, DC 20036
(202) 775-0436
www.amchp1.org

Bright Futures
National Center for Education in Maternal and Child Health
2000 15th Street, North
Suite 701
Arlington, CA 22201-2617
(703) 524-7802
www.brightfutures.org

Center for Healthier Children, Families and Communities
UCLA School of Public Health
10833 Le Conte Ave.
Los Angeles, CA 90095-1772
(310) 206-1898

Children's Defense Fund
25 E Street, NW
Washington, DC 20001
(202) 628-8787
www.cdf.org

Children's Environmental Health Network
5900 Hollis Street, Suite E
Emeryville, CA 94608
(510) 450-3818
www.cehn.org

City MatCH
University of Nebraska Medical Center
600 South 42nd Street
PO Box 982170
Omaha, NE 68198-2170
(402) 559-8323
www.citymatch.org

Families & Work Institute
330 Seventh Avenue
New York, NY 10001
(212) 465-2044
www.familiesandwork.org

Families USA
1334 G Street, NW
Washington, DC 20005
(202) 737-6340
www.familiesusa.org

Family Voices
PO Box 769
Algodones, NM 87001
(505) 867-2368
www.familyvoices.org

I Am Your Child Campaign
1010 Wisconsin Avenue, NW,
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(202) 338-4385
www.iamyourchild.org

Institute for Family-Centered Care
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www.healthlaw.org

Bibliography

* denotes key source

Aliza, B et al. *Partnerships for Healthier Families: Principles for Assuring the Health of Women, Infants, Children, and Youth Under Managed Care Arrangements.* (1996). Washington, DC: Association of Maternal and Child Health Programs.

American Academy of Pediatrics Committee on Communications. (1995). Media Violence. *Pediatrics.* 95(6):949-951.

American Academy of Pediatrics. (1995). Recommendations for Preventive Pediatric Health Care. *Pediatrics.* 96(2):373-374.

Beach Center on Families and Disability. (Unpublished document). *Parent to Parent Support: What Parents Are Saying.*

Becker, M et al. (In press). Evaluation of a Program to Improve the Transition from Birth Hospital to Primary Care. *Ambulatory Child Health*

Bearer, CF. (1995). Environmental Health Hazards: How Children Are Different From Adults. The *Future of Children.* 5(2):11-26.

Bijur, PE et al. (1992). Parental Alcohol Use, Problem Drinking, and Children's Injuries. *Journal of the American Medical Association.* 267(23):3166-3171.

Brazelton, TB. (1995). Working with Families: Opportunities for Early Intervention. *Pediatric Clinics of North America.* 42(1):7.

Brink, S, Shute, N. America's Top HMOs. *US News & World Report.* October 13, 1997, 60-78.

Brody DJ et al. (1994). Blood Lead Levels in the US Population. Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988-1991). *Journal of the American Medical Association.* 272(4):277-284.

Brown, J et al. (1993). Missed Opportunities in Preventive Pediatric Health Care: Immunizations or Well-child Care Visits? *American Journal of Diseases of Children.* 147(10):1081-84.

Brown, TW. *Partnerships for Healthier Families: Roles for State Title V Programs in Assuring Quality Services for Women, Infants, Children, and Youth in Managed Care.* (1997). Washington, DC: Association of Maternal and Child Health Programs.

Cameron, JR et al. (1994). *Evaluating the Clinical and Cost Effectiveness of a Temperament-Based Anticipatory Guidance Program for Parents of Infants in a Health Maintenance Organization.* Presented at the 10th Occasional Temperament Conference; October 20-22, 1994, Berkeley, California.

*Carnegie Corporation of New York. (1994). *Starting Points: Meeting the Needs of Our Youngest Children.* New York, NY: Carnegie Corporation of New York.

Center for Human Development. (1995). *Temperament Talk: A Guide to Understanding Your Child.* Center for Human Development: La Grande, Oregon.

Children's Health Care. *Parent Warmline* 1995 fact sheet.

Committee on Ways and Means, Subcommittee on Human Resources. 1992 *Green Book.* Washington, DC: GPO.

*The Commonwealth Fund. (1996). *Survey of Parents with Young Children.* New York, NY: The Commonwealth Fund.

Cowley, G. (1997). The Language Explosion. *Newsweek.* Spring/Summer:16-22.

Cunningham, AS et al. (1991). Breast-feeding and Health in the 1980s: A Global Epidemiologic Review. *Journal of Pediatrics.* 118(5):659-66

Davis, TC et al. (1996). How Poor Literacy Leads to Poor Health Care. *Patient Care.* 30(16):94-127.

Dodds, M et al. (1993). Group Health Supervision Visits More Effective Than Individual Visits in Delivering Health Care Information. *Pediatrics.* 91(3):668-670.

Duncan, B et al. (1993). Exclusive Breastfeeding for At Least 4 Months Protects Against Otitis Media. *Pediatrics.* 91(5):867-72.

Dworkin, PH. (1993). Ready to Learn: A Mandate for Pediatrics. *Developmental and Behavioral Pediatrics.* 14(3):192-196.

Eggbeer, L et al. (1997). ZERO TO THREE's Developmental Specialist in Pediatric Practice Project: An Important Support for Parents and Young Children. *ZERO TO THREE.* 17(6):3-8.

Bibliography (continued)

Ekwo, EE et al. (1983). Factors Influencing Initiation of Breast-feeding. *American Journal of Diseases in Children*. 137(8):375-377.

Feldman, M. (1974). Cluster Visits. *American Journal of Nursing*. 74(8):1485-1488.

Felitti, VJ et al. (In press). The Relationship of Health Risk Behaviors and Diseases Associated with Leading Causes of Death in Adulthood to Childhood Abuse and Household Dysfunction: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*.

Ferris, TG et al. (1998). Changes in the Daily Practice of Primary Care for Children. *Archives of Pediatric and Adolescent Medicine*. 152(3):227-233.

Field, T et al. (1998). Infants of Depressed Mothers Show "Depressed" Behavior Even with Nondepressed Adults. *Child Development*. 59(6):1569-1579.

Finegan, E, Besnier, N. (1989). *Language: Its Structure and Use*. New York: Harcourt Brace Jovanovich.

Ford, RPK et al. (1993). Breastfeeding and the Risk of Sudden Infant Death Syndrome. *International Journal of Epidemiology*. 22(5):885-890.

*Freund, DA, Lewitt, EM. (1993). Managed Care for Children and Pregnant Women: Promises and Pitfalls. *Future of Children*. 3(2): 92-122.

Fronstin, P. (1997). *EBRI Databook on Employee Benefits*. Washington, DC: Employee Benefit Research Institute.

Fuchs, VR. (1988). *Women's Quest for Economic Equality*. Cambridge, MA: Harvard University Press.

Goldman L et al. (1982). A Multivariate Approach to the Prediction of No-Show Behavior in a Primary Care Center. *Archives of Internal Medicine*. 142(3):563-567.

*Green, M (ed). (1994). *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Alexandria, VA: National Center for Education in Maternal and Child Health.

Grossman, LK et al. (1996). Continuity of Care Between Obstetrical and Pediatric Preventive Care: Indicators of Nonattendance at the First Well-Child Appointment. *Clinical Pediatrics*. 33(5):563-569.

Groves, BM et al. (1993). Silent Victims: Children Who Witness Violence. *Journal of the American Medical Association*. 269(2):262-264.

Guyer, B et al. (1997). Annual Summary of Vital Statistics—1996. *Pediatrics*. 100(6):905-918.

Gwinn, ML et al. (1990). Pregnancy, Breast Feeding, and Oral Contraceptives and the Risk of Epithelial Ovarian Cancer. *Journal of Clinical Epidemiology*. 43(6):559-568.

Hanson, JL et al. (1994). *Hospitals: Moving Forward with Family-Centered Care*. Bethesda, MD: Institute for Family-Centered Care.

Hennighausen, K (1997). (Unpublished document.) *Results of Parent Warmline Satisfaction Survey*.

Horwood, LJ, Fergusson, DM. (1998). Breastfeeding and Later Cognitive and Academic Outcomes. *Pediatrics*. 101(1):e9.

Howard, BJ. (1995). The Referral Role of Pediatricians. *Pediatric Clinics of North America*. 42(1):103-119.

Hutcheson, JJ et al. (1993). Developmental Differences in Interactional Characteristics of Mothers and Their Children with Failure to Thrive. *Journal of Pediatric Psychology*. 18(4):453-466.

International Lactation Consultation Association (1994). *Position Paper on Infant Feeding*. Chicago, IL: International Lactation Consultation Association.

Jonas, S. (1971). Appointment Breaking in a General Medical Clinic. *Medical Care*. 9(1):82-88.

Jones, M, Littman, CL. (1997). Reflections on Becoming a Child Development Specialist in a Primary Pediatric Setting. *ZERO TO THREE*. 17(6):8-15.

Kaplan-Sanoff, M et al. (1997). Enhancing Pediatric Primary Care: Cost Lessons Learned from Pediatric Pathways to Success. *ZERO TO THREE*. 17(6):34-36.

Kaplan-Sanoff, M. (1995). Pediatric Pathways to Success: The Power of Pediatric Practice to Support Families. *ZERO TO THREE*. 16(1):12-17.

Kitzman, H et al. (1997). Effect of Prenatal and Infancy Home Visitation by Nurses on Pregnancy Outcomes, Childhood Injuries and Repeated Childbearing: A Randomized Controlled Trial. *Journal of the American Medical Association*. 278(8):644-652.

Krugman, R.D. (1993). Universal Home Visiting: A Recommendation from the U.S. Advisory Board on Child Abuse and Neglect. *The Future of Children*. 3(3):184-191.

Lavigne, JV et al. (1993). Behavioral and Emotional Problems Among Preschool Children in Pediatric Primary Care: Prevalence and Pediatricians' Recognition. *Pediatrics*. 91(3):649-655.

MacPhee, D. (1984). The Pediatrician as a Source of Information about Child Development. *Journal of Pediatric Psychology*. 9(1):87-100.

*March of Dimes Birth Defects Foundation. (1993). *Healthy Babies, Healthy Business: An Employer's Guidebook on Improving Maternal and Infant Health*. White Plains, NY: March of Dimes Birth Defects Foundation.

*McManus, MA, Dunbar, J. (1995). *Innovative Approaches for the Delivery and Financing of Parent Education Programs in Health Care Settings*. Prepared for The Commonwealth Fund's Healthy Steps for Young Children Program.

Merrett, TG et al. (1988). Infant Feeding and Allergy: Twelve-Month Prospective Study of 500 Babies Born in Allergic Families. *Annals of Allergy*. 61 (6 Pt 2):132-20.

Murray, L, Cooper, PJ. (1997). Effects of Postnatal Depression on Infant Development. *Archives of Disease in Childhood*. 77(2):99-101.

National Academy of Sciences/National Research Council. (1993). *Pesticides in the Diets of Infants and Children*. Washington: National Academy Press.

*National Association of Children's Hospitals and Related Institutions. (1997). *Healthy Children in Healthy Families: Improving Child Health by Supporting Parents*. Alexandria, VA: NACHRI.

National Governors' Association. (1998). *Promising Practices to Improve Results for Young Children*. Available at www.nga.org.

Needleman, HL et al. (1990). The Long-Term Effects of Exposure to Low Doses of Lead in Childhood: An 11-Year Follow-up Report. *New England Journal of Medicine*. 322(2):83-88.

Needleman, HL, Gatsonis, CA. (1990). Low-Level Lead Exposure and the IQ of Children. *Journal of the American Medical Association*. 263(5):673-678.

Needlman, R et al. (1991). Clinic-Based Intervention to Promote Literacy: A Pilot Study. American *Journal of Diseases of Children*. 145(8):881-884.

Olds, DL et al. (1997). Long-term Effects of Home Visitation on Maternal Life Course and Child Abuse and Neglect. *Journal of the American Medical Association*. 278(8):637-643.

Olds, DL et al. (1986). Preventing Child Abuse and Neglect: A Randomized Controlled Study of Nurse Home Visiting. *Pediatrics*. 78(1):65-78.

Osborn, LM, Woolley, FR. (1981). Use of Groups in Well Child Care. *Pediatrics*. 67(5):701-706.

Rogan, WJ. (1995). Environmental Poisoning of Children—Lessons from the Past. *Environmental Health Perspectives*. 103(Suppl 6):19-23.

Rosen, DL et al. (1996). The Temperament Program: Children's Preventive Mental Health Program. *HMO Practice*. 10(3):140-142.

Runyan, DK et al. (1998). Children Who Prosper in Unfavorable Environments: The Relationship to Social Capital. *Pediatrics*. 101(1):12-18.

Sarett, HP et al. Decisions on Breast-feeding or Formula Feeding and Trends in Infant-Feeding Practices. (1983). *American Journal of Diseases in Children*. 137(8):719-725.

Serwint, JR et al. (1996). A Randomized Controlled Trial of Prenatal Pediatric Visits for Urban, Low-income Families. *Pediatrics*. 98(6):1069-1075.

*Shore, R. (1997). *Rethinking the Brain: New Insights into Early Development*. New York, NY: Families & Work Institute.

Singer, G et al. (In press). A Multi-site Evaluation of Parent to Parent Programs for Parents of Children with Disabilities. *Journal of Early Intervention*.

Snow, CE. (1977). The Development of Conversation Between Mothers and Babies. *Journal of Child Language*. 4: 1-22.

Bibliography (continued)

Specht, EM, Bourguet, CC. (1994). Predictors of Nonattendance at the First Newborn Health Supervision Visit. *Clinical Pediatrics*. 33(5):273-279.

Stickler, GB, Simmons, PS. (1995). Pediatricians' Preferences for Anticipatory Guidance Topics Compared with Parental Anxieties. *Clinical Pediatrics*. 34(7):384-387.

Taylor, JA. (1997). A Randomized Controlled Trial of Group Versus Individual Well Child Care for High-risk Children: Maternal-Child Interaction and Developmental Outcomes. *Pediatrics*. 99(6):e9.

Teele, DW et al. (1989). Epidemiology of Otitis Media During the First Seven Years of Life in Children in Greater Boston: A Prospective Cohort Study. *Journal of Infectious Diseases*. 160(1):83-93.

Triggs, EG, Perrin, EC. (1989). Listening Carefully: Improving Communication about Behavior and Development: Recognizing Parental Concerns. *Clinical Pediatrics*. 28(4):185-192.

US Bureau of the Census, March 1996 Current Population Survey.

US Department of Education, Office of Educational Research and Improvement. *NAEP 1994 Reading Report Card for the Nation and the States.*

US Department of Health and Human Services. (1990). *Healthy People 2000*. Washington, DC: US Department of Health and Human Services.

US Department of Health and Human Services. (1993). *Health, United States, 1992*. Washington, DC: US Government Printing Office.

US General Accounting Office. (1998). *Medicaid: Elevated Blood Lead Levels in Children*. Washington, DC: GAO. (GAO/HEHS-98-78)

Weiss, HB. (1993). Home Visits: Necessary but Not Sufficient. *The Future of Children*. 3(3):113-128.

Williams, M et al. (1995). Inadequate Functional Health Literacy Among Patients at Two Public Hospitals. *Journal of the American Medical Association*. 274(21):1677-82.

Woodruff, TJ. (1997). Air Pollution and Infant Mortality. *Environmental Health Perspectives*. 105(6):608-612.

Zeanah, CH et al. (1997). Infant Development and Developmental Risk: A Review of the Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry*. 36(2):165-178.

*ZERO TO THREE. (1997). *Nationwide Survey Among Parents of Zero-To-Three-Year-Olds*. Washington, DC: ZERO TO THREE.

*ZERO TO THREE Bulletin. Two issues focused on supporting infant development through pediatric primary care settings: August/ September 1995 (16:1) and June/ July 1997 (17:6).

ZERO TO THREE. (Unpublished document). *Developmental Specialist in Pediatric Practice Project.*

Zuckerman, B et al. (1995). Silent Victims Revisited: The Special Case of Domestic Violence. *Pediatrics*. 96(3):511-513.

Zuckerman, S et al. (1997). *Questions for States as They Turn to Medicaid Managed Care*. Washington, DC: The Urban Institute.

Research methodology

The strategies presented in this report are by no means the only approaches to delivering early childhood services, and we would welcome information about other promising programs.

Children Now developed this report using the following research methods:

- a literature search;
- interviews with health care professionals and plan administrators at Kaiser Permanente and other health care systems;
- interviews with health care advocates and families; and
- consultation with Children Now's Birth to Three & Managed Care Advisory Committee.

Research on early childhood programs is itself in its infancy. Children Now hopes that managed care organizations will invest in research to help identify the most effective approaches for promoting healthy early childhood development.

Currently celebrating its tenth anniversary, Children Now is a nonpartisan, independent voice for America's children, working to translate the nation's commitment to children and families into action. Children Now's mission is to improve conditions for all children with particular attention to the needs of those who are poor or at risk.

Recognized nationally for its policy expertise and up-to-date information on the status of children, Children Now has a distinguished record of achievement in promoting solutions to problems facing America's children. A hallmark of the organization is the broad partnerships its programs forge with parents, community leaders, lawmakers, businesses and the media. Children Now is a national organization with special depth in California.

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"Investing in the early development of children is the most important commitment any parent, health plan or the nation can make. Children Now's compelling report on the special health care needs of children from birth to three and the unique contributions health plans can make during these early years will focus the attention of parents and managed care leaders nationwide and help advance the ongoing work of the health plan community in this area. We are proud to collaborate with Children Now on this important initiative."

■ Karen Ignagni, President and CEO, American Association of Health Plans

"Children Now has issued a worthy challenge to health plans to enhance the value of their product for purchasers by providing quality, comprehensive and cost-effective early childhood development services."

■ Mary Jane England, MD, President, Washington Business Group on Health
Past President, American Psychiatric Association

"It is widely recognized that health providers need to address the multifaceted nature of children's development as an integral part of assuring child health. Children Now's report takes this message form rhetoric to action. It makes a compelling case for viewing the health care system as the pivotal institution for linking children and families to essential services prior to school entry and offers managed care organizations a wealth of strategies for assuming this role. If health providers step up this challenge, there is no doubt that children, families, and communities will benefit enormously in both the short and long-term."

■ Deborah Phillips, Ph.D., Director, Board on Children, Youth, and Families
Institute of Medicine & National Research Council

"This report defines managed care's significant potential for promoting the optimal development of young children. By following these recommendations, managed care plans can help rebuild the public's confidence in their commitment to providing high-quality services for all of their members."

■ Ron Pollack, Executive Director, Families USA

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Managed Care and Early Childhood Development

In Brief

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62

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About This Project

In 1998, Children Now, Kaiser Permanente and the *I Am Your Child* public awareness campaign are convening health plan leaders to discuss their industry's investment in early childhood development services. Over the next several years, Children Now will work with these and other managed care organizations to fulfill this plan and mark their progress. In addition, Children Now will work with the community of health insurance purchasers (purchasing groups, government and individuals) to build a demand for quality early childhood development services and with researchers to create and implement consumer and employer accountability tools.

This publication is based on a full report which includes additional information on the status of families with young children and on the goals and strategies compiled by Children Now. A future report will address adolescent health. To order the full report or for more information, please call Children Now at **(510) 763-2444**. The report is also available through Children Now's website, **www.childrennow.org**.

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Our nation is poised to take action for young children.

Neuroscientists tell us that children's experiences and environment have a profound influence on their brain development. Surveys show that families want information, support and guidance about how to nurture their children during their first three years. And when this support is provided appropriately, children and families can flourish.

Yet our society lacks a single point of entry through which families with infants and toddlers can access the services they need. An infant has no equivalent to public school, the century-old institution that brings together children, families and their communities.

Where are families with the youngest children to go?

One infrastructure that exists—and is becoming near-universal for children—is the health care system: not only is it the first institution that families encounter with their newborns, but for most, it is also their only source of regular contact dedicated to promoting child and family well-being. Increasingly, that infrastructure is a managed care organization.[1]

Families with young children already expect their managed care organization to provide access to services related to their child's physical well-being. But health care encompasses more than treating disease. Promoting children's health also includes addressing their emotional, cognitive and social development. All four are intertwined and require focused attention.

The unique characteristics of managed care organizations—including the links they create among health professionals and institutions and their fiscal incentive to focus on preventive care—make them particularly well-suited to meeting the needs of families for child development services and guidance. This report, with strategies derived from these characteristics, can help health plans create their own early childhood plan of action.

We are poised to take action for young children. Managed care organizations are critical to our nation's success.

Managed care organizations are critical to our nation's success.

From Birth to Three: *A Critical Time for Families*

A child's genes may open doors, but his daily experiences enable him to walk across each threshold.

Our understanding of the human brain has come far in just a few decades. Not too long ago, scientists conceptualized the newborn brain as relatively inactive, with a gradual but steady increase in complexity as the child approached adulthood. Genetic endowment overshadowed the importance of the environment for determining the child's future abilities and character.[1,2]

But, recently, the consensus on early childhood development has shifted. While researchers still agree that children are born with a certain genetic make-up, they now almost universally believe that the newborn brain is remarkably flexible. A child's experiences and environment interact with his genetic endowment as he develops socially, emotionally, cognitively and physically. His genes may open doors, but his daily experiences enable him to walk across each threshold.[3]

Families, the constant caregivers in children's lives, can offer love and nurturing that strengthen children's ability to cope with the negative consequences of future stress.[5] But many families today live under extraordinary pressures. One in four American children under age three is growing up in poverty, a 30 percent increase in twenty years.[6] Many families with young children also experience isolation, living far away from extended family—what used to be a common support network.[7] Environmental hazards can be especially harmful for young children, whose normal exploratory behavior puts them at heightened risk for toxic exposure.[8] Smoking, depression and other aspects of adult health can also seriously affect the health and well-being of young children.[9,10]

Given these conditions, it is no wonder that families with young children express a clear need for support and guidance:

- Only 44 percent of first-time parents say they feel very confident about caring for their newborn baby.[11]
- Less than half of parents say that they know what signs to watch for with their child's emotional, social or intellectual development.[12]

- Sixty percent of parents report that they would be extremely or very interested in receiving more information about brain development.[13]

The unique opportunities of managed care

Who can provide families with support and guidance about these issues?

The American Academy of Pediatrics' schedule of well-baby visits calls for 10 check-ups before the age of three.[14] Thus, clinicians have frequent opportunities to assess child and family well-being and help families nurture their children during each developmental transition.[15]

Increasingly, pediatric care is provided through managed care organizations (MCOs).[16,17] Certain features of MCOs—such as being integrated delivery systems, focusing on prevention and promoting quality improvement efforts—can enhance their ability to implement early childhood development services, such as those proposed in this report.

About this report

This report identifies two critical goals towards creating an effective system for delivering early childhood development services in a managed care setting:

- **create an early childhood development infrastructure**, which includes the appropriate personnel and services in the benefits package, and
- **provide a seamless system of early childhood development services** that facilitates links within the managed care organization as well as between the managed care organization and the community.

We have compiled thirteen strategies that can help health plans reach these goals. We also propose an implementation process for health plans as they assess and build their early childhood development systems, one that emphasizes the inclusion of health plan members in decision-making.

The top leaders of managed care organizations can strengthen their early childhood development systems by encouraging innovation, promoting internal discussions about child development interventions and offering financial support for innovative programs.

Families with young children express a clear need for support and guidance.

Goal 1: *Create An Early Childhood Development Infrastructure*

Managed care organizations differ from traditional health insurance, in part, by integrating a wide array of personnel and services. With the growing recognition of the importance of early childhood development, plans may find that creating a well-defined early childhood development infrastructure—with specialized personnel and services—helps them better meet the parenting needs of their members.

Nearly three in four families who had access to a developmental specialist said they knew more about helping their child learn.

Strategy 1 Incorporate developmental specialists into pediatric primary care settings

By adding a child development specialist to the well-child care team, managed care organizations signal their belief that developmental and behavioral well-being are as important as physical health. The organization ZERO TO THREE found that nearly three in four families who had access to a developmental specialist said they knew more about helping their child learn.[18] The availability of the child development specialist also helped to increase pediatricians' satisfaction.

Strategy 2 Include family advocates as part of the well-child care team

Following their child's birth, families must master a vast array of information about pediatric services. One solution is to provide access to a family advocate, a community member who is comfortable navigating the health care system. An evaluation of Pediatric Pathways to Success at Boston Medical Center indicates that infants with access to an expanded pediatric team, including a family advocate, had fewer hospitalizations and emergency room visits and kept more of their well-child visits.[19]

Strategy 3 Offer universal, voluntary home visiting for families with newborns

Home visiting enables health care providers to tailor important child development messages to reflect a child's family and environment in ways that an office visit cannot. By traveling to the family, the home visitor confirms that the family is the primary source of care for the child and that the health plan's role is to support that relationship.[20] In one survey, 67 percent of families who used a home visiting service found it useful.[21]

Strategy 4 Offer group well-child visits

Group well-child visits offer an efficient means for providing families with young children timely, prevention-oriented information in a cooperative setting. With roughly six families sharing a one-hour appointment, families have time to discuss their concerns, experiences and frustrations in depth and pediatric clinicians can learn more about their patients. In one study of

group visits, families and pediatricians discussed nearly four times as many parenting issues than during individual visits.[22]

Strategy 5 Use questionnaires prior to a child's visit to identify parenting concerns

Families, knowing that much needs to happen during a well-child visit, may not feel comfortable raising child development issues. By inviting families to fill out a child development questionnaire, clinicians open the agenda for the visit and create a partnership between themselves and families.[23] One study found that families who showed their completed questionnaire to their pediatrician discussed nearly twice as many of their concerns during their visit than other families.[24]

Strategy 6 Provide temperament assessment and follow-up services

Families who misunderstand their children's temperament may become frustrated by their behavior. Temperament assessments and counseling can help families interpret their child's behavior and prepare for each developmental stage. In one study, families who received temperament information scheduled fewer visits with their primary care provider. Researchers attribute this difference not to the relative "easiness" of some children, but rather to the counseled parents' knowledge of how to cope with challenging behavior.[25]

Strategy 7 Provide access to child development support through a telephone system

Even though families with young children can expect to make numerous visits to their pediatric provider for well-child and sick visits, questions and challenges about children's development may arise at any time. Access to a non-crisis child development "warm line" can help fill the gaps between visits. Over 90 percent of callers to a warm line sponsored by Children's Health Care in Minnesota agreed that it helped them better understand their situation and 73 percent reported that their situation improved as a result of their call with the warm line.[26]

In one study of group visits, families and pediatricians discussed nearly four times as many parenting issues than during individual visits.

Goal 2: *Provide A Seamless System of Early Childhood Development Services*

With each new phase in their children's development, families face new parenting challenges and may benefit from newly tailored parenting support. Managed care organizations can help families make these transitions between services within the health plan (from obstetrics to pediatrics, for example) and to services offered in the community.

Strategy 8 Begin parenting education in the prenatal period

During a prenatal visit with a pediatric clinician, families can receive important guidance about early childhood development and learn about the range of pediatric services available within the plan and in the community. In one study of inner city families, women who participated in a prenatal pediatric visit took their children to the emergency room 50 percent less than their control group peers.[27]

Women who participated in a prenatal pediatric visit took their children to the emergency room 50 percent less than their control group peers.

Strategy 9 Ensure scheduling of the first well-child visit prior to hospital discharge and follow-up as needed

Health care is a habit: missing one well-child appointment increases the risk for future missed appointments.[28] Enabling families to schedule their first well-child visit before hospital discharge is one crucial step in promoting good habits; some health plans may need to add a follow-up system. The Boston Healthy Connections program, which prompts families to follow the well-child visit schedule through telephone calls and home visits, dramatically increased the number of kept appointments and reduced emergency room visits in the first month of life by 75 percent.[29]

Strategy 10 Encourage all health care providers and administrative staff to promote key child development messages

Managed care organizations can complement existing efforts to promote healthy early childhood development by involving all staff in the delivery of key messages. For example, Reach Out and Read, in which pediatric clinicians discuss reading and distribute children's books, documents success in increasing the number of families who read aloud to their children.[31] Also, breastfeeding rates at the time of mother-baby hospital discharge rose from 56 to 91 percent through one comprehensive support program.[32]

Strategy 11 Link community and social supports to pediatric primary care

Homelessness, domestic violence, substance abuse and other family and community health issues can powerfully influence children's well-being and their families' ability to take care of them. Linking social services to pediatric primary care, by providing on-site access to social workers, attorneys and advocates and by facilitating community referrals, is one way for health plans to help families address these critical issues.[32]

Strategy 12 Establish a system for referral follow-up

In the course of addressing a child's developmental needs, pediatric primary care providers may decide to refer the family to another provider either within the health plan or (depending on the health plan's rules and outside contracts) to another provider or program in the community. However, families may experience multiple barriers when trying to fulfill a referral for child development information, support or services. By tracking referrals, one health plan reports that it can help prevent families from "falling through the cracks."[33]

Strategy 13 Coordinate with state and community health services

By promoting coordination with community-based services, managed care organizations not only ensure that families have access to the programs they need, but they also avoid duplicating existing resources found in the government, nonprofit and private sectors. For example, preventing and treating lead poisoning in children requires a multifaceted approach, including health departments, clinics, housing authorities and advocacy services. Managed care plans have successfully served as case managers, ensuring that families receive the full-scope of services for their lead-poisoned children.[34]

Breastfeeding rates at the time of mother-baby hospital discharge rose from 56 to 91 percent through one comprehensive support program.

Implementation: *Establish An Early Childhood Development Monitoring System*

Managed care organizations have many opportunities to support families in their parenting role. No single strategy is the perfect strategy. Rather, managed care organizations will need to embark on a process to develop an appropriate set of early childhood services, drawn perhaps from the menu provided in this report and possibly from other sources as well.

Children Now has developed a road map for this process, called an "Early Childhood Development Monitoring System." This template includes three key components: creating an Early Childhood Work Group with health plan administrators, providers and families; collecting important data; and reporting to membership about progress and next steps.

Early Childhood Work Group

The mission of the Early Childhood Work Group would be to (1) assess the current array of child development services; (2) create a plan of action for integrating new policies and programs; and (3) monitor its implementation. Work Group members would include health care providers, top plan administrators and leaders and several families with young children.

Data collection

One recommended action for the Early Childhood Work Group is to decide which data measures should be collected. There are two broad types of data that health plans might find useful: data documenting the services families have and those they need and data documenting the effects of particular services. Both types of information are critical as the health plan establishes their early childhood plan of action and documents their progress to businesses and consumers.

Reporting to membership

The Early Childhood Work Group should submit an Annual Report to the health plan's membership (consumers and purchasers) that summarizes the health plan's progress in enhancing its child development services. The Annual Report would include the data that the health plan collected, as well as a summary of the strategies that have been implemented.

Involving families is critical for success

As a health plan develops and monitors its system of early childhood services, ongoing involvement of health plan families will help ensure that decisions reflect members' needs and experiences. Montefiore Medical Center in the Bronx has a multi-faceted family-centered care initiative, which includes the Family Advocate program (see page 4), the installation of a Family Learning Place and the involvement of families in the development of a new children's hospital. Participating families will receive training in the process of hospital design, while hospital staff, architects and other consultants learn about how to collaborate effectively with community members. "Family participation in the design of our new children's hospital and our other family-centered care activities is crucial in ensuring that we provide facilities and programs that meet the needs of our children and their families," says Gregory Burke, Vice President of Planning at Montefiore Medical Center.

Conclusion: *Right Time, Right Place*

Managed care organizations are uniquely positioned to serve as the gateway to information and services that foster young children's development. This report documents promising strategies that plans could undertake and suggests a process for monitoring and improving services within each plan.

Our infants and toddlers deserve a health care system that actively promotes healthy early childhood development. Health plans, the purchasing community and families each have a critical role to play in ensuring that one is built.

Endnotes

[1] Seventy-seven percent of Americans and their dependents who have employer-based insurance are enrolled in a managed care plan, as are forty percent of all Medicaid recipients. Mercer/Foster Higgins employer survey quoted in Brink, S, Shute, N. America's Top HMOs. *US News & World Report*. October 13, 1997. 60-78. Zuckerman, S et al. (1997). *Questions for States as They Turn to Medicaid Managed Care*. Washington, DC: The Urban Institute.

[2] This section generally: Shore, R. (1997). *Rethinking the Brain: New Insights into Early Development*. New York, NY: Families & Work Institute.

[3] Zeanah, CH et al. (1997). Infant Development and Developmental Risk: A Review of the Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry*. 36(2):165-178.

[4] To avoid the awkwardness of "he or she," and yet describe children of both genders, we switch between the two.

[5] Shore, R. (1997).

[6] March 1996 Current Population Survey, US Bureau of the Census, compiled by the National Center for Children in Poverty.

[7] Carnegie Corporation of New York. (1994). *Starting Points: Meeting the Needs of Our Youngest Children*. New York, NY: Carnegie Corporation of New York.

[8] Bearer, CF. (1995). Environmental Health Hazards: How Children Are Different From Adults. *The Future of Children*. 5(2):11-26.

[9] Etzel, RA. (1995). Indoor Air Pollution and Childhood Asthma: Effective Environmental Interventions. *Environmental Health Perspectives*. 103(Suppl 6):55-58.

[10] Murray, L, Cooper, PJ. (1997). Effects of Postnatal Depression on Infant Development. *Archives of Disease in Childhood*. 77(2):99-101.

[11] The Commonwealth Fund. (1996). *Survey of Parents with Young Children*. New York, NY: The Commonwealth Fund.

[12] ZERO TO THREE. (1997). *Nationwide Survey Among Parents of Zero-To-Three-Year-Olds*. Washington, DC: ZERO TO THREE.

[13] *Ibid*.

[14] American Academy of Pediatrics. (1995). Recommendations for Preventive Pediatric Health Care. *Pediatrics*. 96(2):373-374.

[15] Dworkin, PH. (1993). Ready to Learn: A Mandate for Pediatrics. *Developmental and Behavioral Pediatrics*. 14(3):192-196.

[16] In this report, "managed care plan" and "health plan" are used interchangeably to refer to a prepaid, integrated health care delivery system.

[17] Zuckerman, S et al. (1997).

[18] ZERO TO THREE. (Unpublished document). Developmental Specialist in Pediatric Practice Project.

[19] Kaplan-Sanoff, M et al. (1994). Enhancing Pediatric Primary Care: Cost Lessons Learned from Pediatric Pathways to Success. *ZERO TO THREE*. 17(6):34-36.

[20] Weiss, HB. (1993). Home Visits: Necessary but Not Sufficient. *The Future of Children*. 3(3):113-128.

[21] The Commonwealth Fund. (1996).

[22] Dodds, M et al. (1993). Group Health Supervision Visits More Effective Than Individual Visits in Delivering Health Care Information. *Pediatrics*. 91(3):668-670.

[23] Green, M (ed.). (1994). *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Alexandria VA: National Center for Education Materials and Child Health.

[24] Triggs, EG, Perrin, EC. (1989). Listening Carefully: Improving Communication About Behavior and Development. *Clinical Pediatrics*. 28(4):185-192.

[25] Cameron, JR. et al. (1994). Evaluating the Clinical and Cost Effectiveness of a Temperament-Based Anticipatory Guidance Program for Parents of Infants in a Health Maintenance Organization. Presented at the 10th Occasional Temperament Conference; October 20-22, 1994, Berkeley, California.

[26] Children's Health Care. *Results of Parent Wamline Satisfaction Survey*. (Unpublished document).

[27] Serwint, JR. et al. A Randomized Controlled Trial of Prenatal Pediatric Visits for Urban, Low-income Families. *Pediatrics*. 98(6):1069-1075.

[28] Jonas, S. (1971). Appointment Breaking in a General Medical Clinic. *Medical Care*. 9(1):82-88. Goldman L. et al. (1982). A Multivariate Approach to the Prediction of No-Show Behavior in a Primary Care Center. *Archives of Internal Medicine*. 142(3):563-567.

[29] Becker, M et al. (In press). Evaluation of a Program to Improve the Transition from Birth Hospital to Primary Care. *Ambulatory Child Health*.

[30] Needleman, R et al. (1991). Clinic-Based Intervention to Promote Literacy: A Pilot Study. *American Journal of Diseases of Children*. 145(8):881-884.

[31] Data provided by Melodee Deutsch, R.N.C., MS, MPH, CPHQ, Kaiser Permanente Honolulu Hospital Administration.

[32] Kaplan-Sanoff, M et al. (1997).

[33] Interview with Dan Olsten, Developmental Consultation Services and Early Intervention, *Harvard Vanguard Medical Associates*.

[34] Interview with Sheila McGlone, Nurse Case Management Specialist, HealthSource/Westchester Prepaid Health Services Plan.

Credits

Right Time, Right Place: Managed Care & Early Childhood Development was researched and written by Jessica Reich and edited by Michael Burgmaier, Amy Dominguez-Arms and Lois Salisbury. Nefreturi Cooley and Noralee Cole proofread the report and Maisah Pradia provided administrative support.

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74

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Statements of Support

"The importance of children's brain development during the first three years can no longer be ignored. The health care industry, as Children Now proposes, must play an active role in ensuring that parents have the information they need."

■ Rob Reiner, Chairman & Founder, *I Am Your Child*, public awareness campaign

"Children Now has issued a worthy challenge to health plans to enhance the value of their product for purchasers by providing quality, comprehensive and cost-effective early childhood development services."

■ Mary Jane England, MD, President, Washington Business Group on Health, Past President, American Psychiatric Association

"Investing in the early development of children is the most important commitment any parent, health plan or the nation can make. Children Now's compelling report on the special health care needs of children from birth to three and the unique contributions health plans can make during these early years will focus the attention of parents and managed care leaders nationwide and help advance the ongoing work of the health plan community in this area. We are proud to collaborate with Children Now on this important initiative."

■ Karen Ignagni, MBA, President and CEO, American Association of Health Plans

"It is widely recognized that health providers need to address the multi-faceted nature of children's development as an integral part of assuring child health. Children Now's report takes this message form rhetoric to action. It makes a compelling case for viewing the health care system as the pivotal institution for linking children and families to essential services prior to school entry and offers managed care organizations a wealth of strategies for assuming this role. If health providers step up this challenge, there is no doubt that children, families, and communities will benefit enormously in both the short and long-term."

■ Deborah Phillips, PhD, Director, Board on Children, Youth, and Families Institute of Medicine & National Research Council

"This report defines managed care's significant potential for promoting the optimal development of young children. By following these recommendations, managed care plans can help rebuild the public's confidence in their commitment to providing high-quality services for all of their members."

■ Ron Pollack, Executive Director, Families USA

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ZERO TO THREE

Currently celebrating its tenth anniversary, Children Now is a nonpartisan, independent voice for America's children, working to translate the nation's commitment to children and families into action. Children Now's mission is to improve conditions for all children with particular attention to the needs of those who are poor or at risk.

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